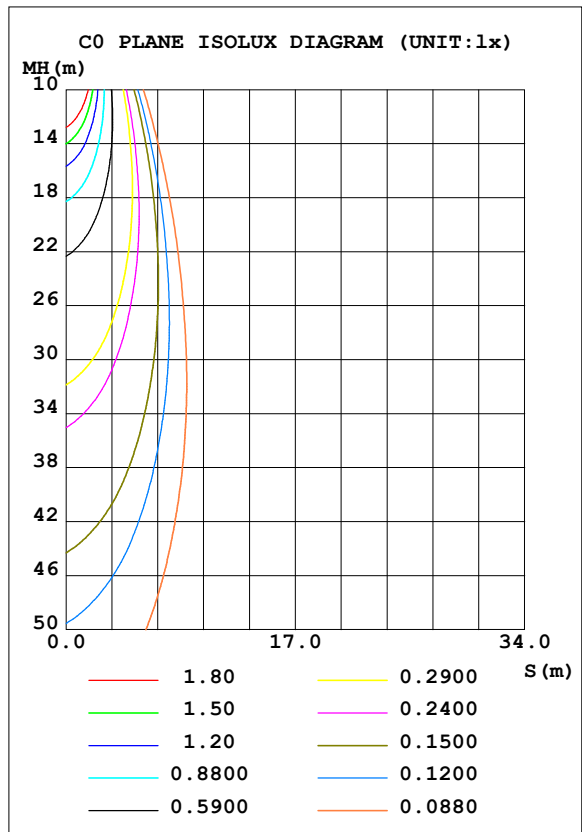
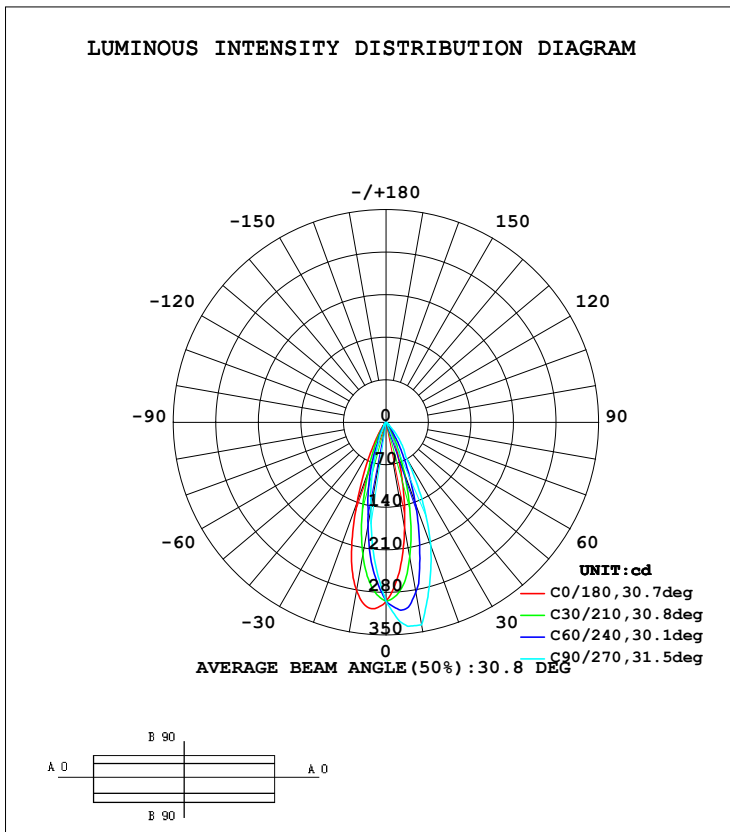


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:0V I:0A P:0W PF:0 Lamp Flux:119.645x1 lm		
NAME:REL35	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019090901
MFR.:	SUR.:0.008	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	REL35	I _{max} (cd)	354.0	S/MH (C0/180)	0.61
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	0.33
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	119.65	η UP, DN (C0-180)	0.0, 68.2
NOMINAL FLUX (lm)	119.645	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 31.8
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	0.50



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-09-09

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Humidity:65.0%
 Test Distance:13.669m [K=1.0000]
 Remarks: 8/20 LENS

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
5	248.4	294.5	333.0	338.3	307.2	257.1	224.3	219.3	0- 5	6.806	6.806	5.69,5.69
10	177.0	253.7	338.4	345.2	280.7	195.1	143.5	139.2	5- 10	18.23	25.04	20.9,20.9
15	108.4	187.2	277.0	304.7	220.7	126.6	90.43	75.71	10- 15	23.97	49.01	41,41
20	56.99	109.5	215.7	215.2	140.0	76.59	37.41	39.90	15- 20	23.09	72.10	60.3,60.3
25	27.50	58.17	140.9	133.0	76.41	36.73	22.98	18.18	20- 25	17.95	90.04	75.3,75.3
30	13.09	28.82	66.16	71.77	36.28	17.30	8.561	8.668	25- 30	11.76	101.8	85.1,85.1
35	6.484	13.55	46.81	33.66	16.66	9.116	6.569	4.847	30- 35	6.705	108.5	90.7,90.7
40	3.854	6.546	27.47	14.66	8.238	4.327	4.577	3.088	35- 40	4.172	112.7	94.2,94.2
45	2.694	4.251	9.840	8.843	4.748	3.235	2.726	2.249	40- 45	2.567	115.3	96.3,96.3
50	1.666	2.738	5.968	5.429	3.420	2.290	1.999	1.503	45- 50	1.541	116.8	97.6,97.6
55	0.9779	1.610	3.815	3.458	2.273	1.479	1.413	0.8909	50- 55	1.082	117.9	98.5,98.5
60	0.5580	0.9891	1.663	2.239	1.254	1.006	0.8261	0.6341	55- 60	0.7158	118.6	99.1,99.1
65	0.2362	0.5315	1.035	1.228	0.6857	0.5878	0.5901	0.4521	60- 65	0.4215	119.0	99.5,99.5
70	0.0966	0.2172	0.4076	0.5663	0.2572	0.3702	0.3540	0.3311	65- 70	0.2413	119.3	99.7,99.7
75	0.0751	0.0490	0.3164	0.2263	0.0322	0.3645	0.3165	0.2341	70- 75	0.1324	119.4	99.8,99.8
80	0.0537	0.0354	0.2253	0.1331	0.0322	0.3197	0.2789	0.2049	75- 80	0.0996	119.5	99.9,99.9
85	0.0429	0.0391	0.1341	0.0883	0.0322	0.2675	0.2414	0.1937	80- 85	0.0868	119.6	99.9,99.9
90	0.0429	0.0429	0.0429	0.0429	0.0410	0.2146	0.2038	0.1824	85- 90	0.0736	119.6	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd								UNIT:lm			

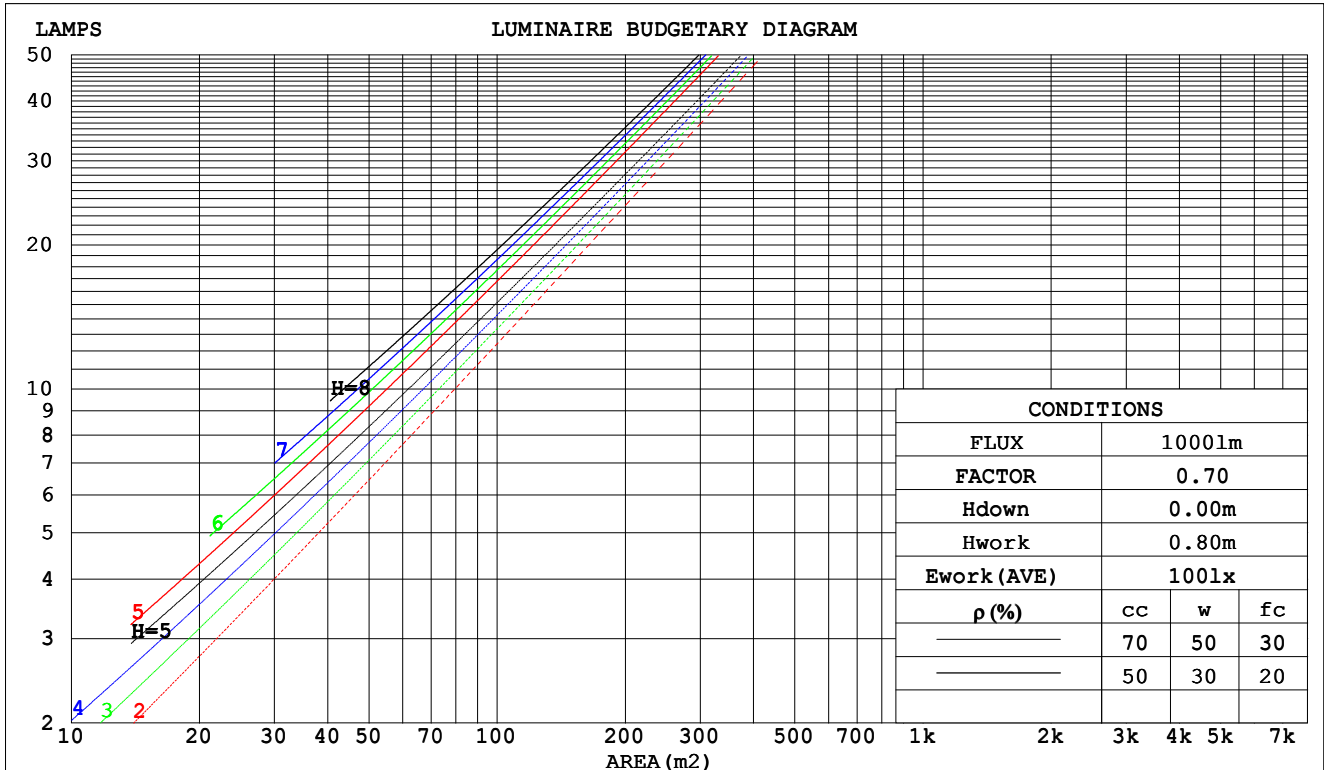
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-09-09

γ Range: 0 - 90DEG
 γ UnUerval: 0.5DEG
 HumidiUy:65.0%
 Remarks: 8/20 LENS

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:0V I:0A P:0W PF:0 Lamp Flux:119.645x1 lm		
NAM : REL35	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019090901
MFR.:	SUR.:0.008	PROTECTION ANGLE:

ρcc	80%			70%			50%			30%			10%			0
	ρw	ρfc	RCR	ρw	ρfc	RCR	ρw	ρfc	RCR	ρw	ρfc	RCR	ρw	ρfc	RCR	0
	50%	20%	RCR:Room Cavity Ratio	50%	20%	RCR	50%	20%	RCR	50%	20%	RCR	50%	20%	RCR	0
	Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.12	1.09	1.07	1.10	1.08	1.06	1.05	1.04	1.02	1.02	1.01	.99	.98	.97	.97	.95
2.0	1.05	1.02	.99	1.03	1.00	.97	1.00	.98	.95	.97	.95	.93	.95	.93	.91	.90
3.0	.99	.95	.91	.98	.94	.91	.95	.92	.89	.93	.90	.88	.91	.89	.87	.85
4.0	.94	.89	.86	.93	.89	.85	.91	.87	.84	.89	.86	.83	.87	.84	.82	.81
5.0	.89	.84	.81	.88	.84	.80	.87	.83	.80	.85	.82	.79	.84	.81	.78	.77
6.0	.85	.80	.76	.84	.80	.76	.83	.79	.76	.82	.78	.75	.80	.77	.75	.73
7.0	.81	.76	.73	.81	.76	.72	.80	.75	.72	.78	.75	.72	.77	.74	.71	.70
8.0	.78	.73	.69	.77	.72	.69	.76	.72	.69	.75	.71	.69	.74	.71	.68	.67
9.0	.75	.70	.66	.74	.69	.66	.73	.69	.66	.72	.69	.66	.72	.68	.65	.64
10.0	.72	.67	.63	.71	.67	.63	.71	.66	.63	.70	.66	.63	.69	.66	.63	.62



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-09-09

γ Range: 0 - 90DEG
 γ UnUerval: 0.5DEG
 Remarks: 8/20 LENS



WEC AND CCEC

Test:U:0V I:0A P:0W PF:0 Lamp Flux:119.645x1 lm		
NAM : REL35	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019090901
MFR.:	SUR.:0.008	PROTECTION ANGLE:

ρCC	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.161	.091	.029	.154	.088	.028	.141	.081	.026	.130	.075	.024	.119	.069	.022	
2.0	.151	.083	.025	.146	.080	.025	.135	.075	.023	.126	.070	.022	.117	.066	.021	
3.0	.143	.076	.023	.138	.074	.022	.129	.070	.021	.121	.066	.020	.113	.063	.019	
4.0	.135	.070	.021	.131	.068	.020	.123	.065	.020	.116	.062	.019	.110	.060	.018	
5.0	.128	.065	.019	.124	.064	.019	.118	.061	.018	.112	.059	.018	.106	.057	.017	
6.0	.121	.061	.017	.118	.060	.017	.113	.058	.017	.107	.056	.016	.102	.054	.016	
7.0	.116	.057	.016	.113	.056	.016	.108	.055	.016	.103	.053	.015	.099	.051	.015	
8.0	.110	.054	.015	.108	.053	.015	.104	.052	.015	.099	.050	.015	.096	.049	.014	
9.0	.106	.051	.014	.104	.050	.014	.100	.049	.014	.096	.048	.014	.092	.047	.014	
10.0	.101	.049	.013	.099	.048	.013	.096	.047	.013	.093	.046	.013	.089	.045	.013	

ρCC	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.170	.157	.146	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.153	.133	.115	.131	.114	.099	.090	.079	.069	.052	.046	.041	.017	.015	.013	
3.0	.140	.113	.092	.120	.098	.080	.082	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.129	.098	.075	.110	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.119	.087	.062	.102	.075	.054	.070	.052	.038	.041	.031	.023	.013	.010	.008	
6.0	.111	.077	.052	.095	.067	.046	.066	.047	.032	.038	.027	.019	.012	.009	.006	
7.0	.104	.069	.045	.089	.060	.039	.062	.042	.028	.036	.025	.016	.012	.008	.005	
8.0	.098	.063	.038	.084	.054	.033	.058	.038	.024	.034	.022	.014	.011	.007	.005	
9.0	.093	.057	.033	.080	.050	.029	.055	.035	.021	.032	.021	.012	.010	.007	.004	
10.0	.088	.053	.029	.076	.046	.025	.053	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-09-09

γ Range: 0 - 90DEG
 γ UnUerval: 0.5DEG
 HumidiUy:65.0%
 Remarks: 8/20 LENS

UGR(Unified Glare Rating) Table

Test:U:0V I:0A P:0W PF:0 Lamp Flux:119.645x1 lm										
NAM : REL35					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:2019090901		
MFR.:					SUR.:0.008			PROTECTION ANGLE:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	1.5	2.3	1.7	2.5	2.6	9.2	10.0	9.4	10.2	10.3
3H	1.4	2.1	1.6	2.3	2.5	9.1	9.8	9.3	10.0	10.2
4H	1.3	2.0	1.6	2.2	2.4	9.0	9.7	9.3	10.0	10.2
6H	1.2	1.9	1.5	2.1	2.4	9.0	9.6	9.3	9.9	10.1
8H	1.2	1.8	1.5	2.1	2.3	8.9	9.6	9.2	9.8	10.1
12H	1.1	1.8	1.5	2.0	2.3	8.9	9.5	9.2	9.8	10.1
4H 2H	1.6	2.3	1.9	2.5	2.7	9.0	9.7	9.3	9.9	10.1
3H	1.5	2.1	1.8	2.3	2.6	8.9	9.5	9.2	9.8	10.0
4H	1.4	1.9	1.7	2.2	2.5	8.8	9.4	9.1	9.7	10.0
6H	1.3	1.8	1.7	2.1	2.5	8.7	9.2	9.1	9.6	9.9
8H	1.3	1.7	1.6	2.1	2.4	8.7	9.2	9.1	9.5	9.9
12H	1.2	1.6	1.6	2.0	2.4	8.7	9.1	9.1	9.5	9.9
8H 4H	1.2	1.7	1.6	2.0	2.4	8.6	9.1	9.0	9.5	9.8
6H	1.2	1.5	1.6	1.9	2.3	8.6	9.0	9.0	9.3	9.8
8H	1.1	1.5	1.6	1.9	2.3	8.5	8.9	9.0	9.3	9.7
12H	1.1	1.4	1.6	1.8	2.3	8.5	8.8	9.0	9.2	9.7
12H 4H	1.2	1.6	1.6	2.0	2.4	8.6	9.0	9.0	9.4	9.8
6H	1.1	1.4	1.5	1.9	2.3	8.5	8.9	9.0	9.3	9.7
8H	1.1	1.4	1.5	1.8	2.3	8.5	8.8	8.9	9.2	9.7
Variations with the observer position at spacings:										
S = 1.0H	+ 2.0 / - 4.3					+ 4.8 / - 6.3				
1.5H	+ 2.0 / - 2.6					+ 6.8 / - 6.3				
2.0H	+ 3.1 / - 5.0					+ 5.3 / - 5.3				

CIE Pub.117 Corrected 119.6 lm Total Lamp Luminous Flux. (8log(F/F0) = -7.4)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-09-09

γ Range: 0 - 90DEG
 γ UnUerval: 0.5DEG
 HumidiUy:65.0%
 Remarks: 8/20 LENS



UTILIZATION FACTORS TABLE

Test:U:0V I:0A P:0W PF:0 Lamp Flux:119.645x1 lm		
NAM : REL35	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019090901
MFR.:	SUR.:0.008	PROTECTION ANGLE:

REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	88	82	78	87	81	78	87	81	78	74
0.80	95	89	86	95	89	86	93	89	85	82
1.00	100	94	91	99	94	90	97	93	90	86
1.25	104	98	95	102	98	95	101	97	94	90
1.50	106	102	98	105	101	98	103	99	97	92
2.00	109	105	102	107	104	101	105	102	99	94
2.50	110	107	104	109	105	103	106	103	101	95
3.00	112	109	106	110	107	105	107	104	103	96
4.00	114	111	109	112	110	108	108	106	105	98
5.00	115	113	111	113	111	110	109	108	106	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-09-09

γ Range: 0 - 90DEG
 γ UnUerval: 0.5DEG
 HumidiUy:65.0%
 Remarks: 8/20 LENS

ISOCANDELA DIAGRAM

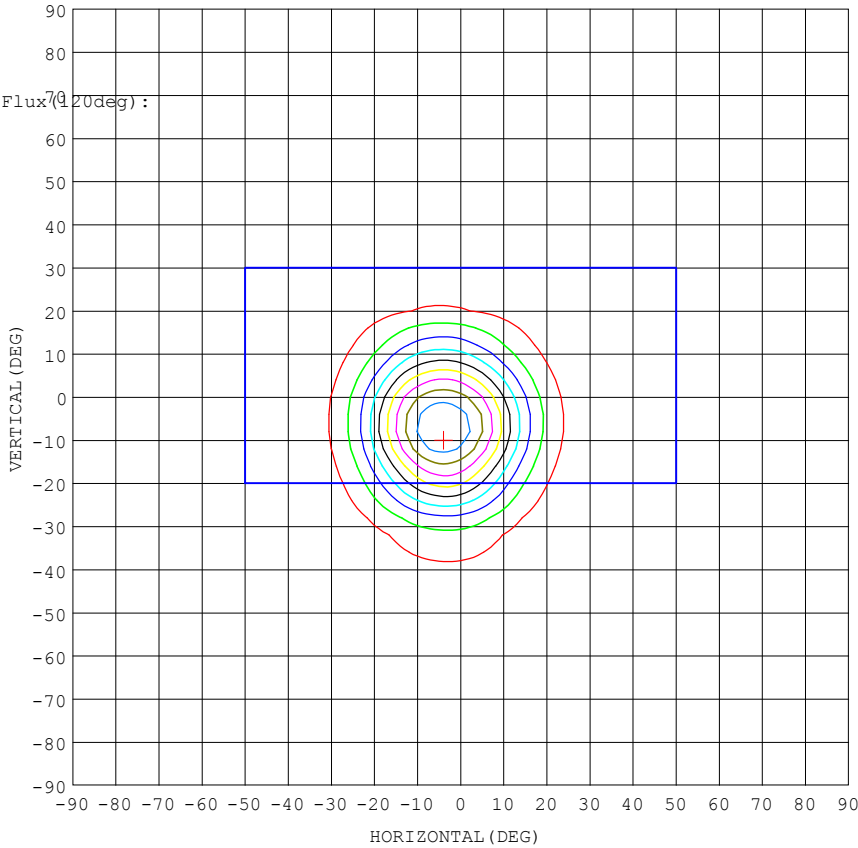
Test:U:0V I:0A P:0W PF:0 Lamp Flux:119.645x1 lm		
NAM : REL35	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019090901
MFR.:	SUR.:0.008	PROTECTION ANGLE:

Conical surface Flux(90deg):

115.25 lm
 %lum = 96.3%
 %lamp = 96.3%

Conical surface Flux(70deg):

118.59 lm
 %lum = 99.1%
 %lamp = 99.1%



- 10% 35.41
- 20% 70.82
- 30% 106.2
- 40% 141.6
- 50% 177.0
- 60% 212.5
- 70% 247.9
- 80% 283.3
- 90% 318.7

MAX = 354.08
 MIN = 0.7839
 AVG = 63.060
 AVG/MAX = 0.18
 MIN/MAX = 0.00

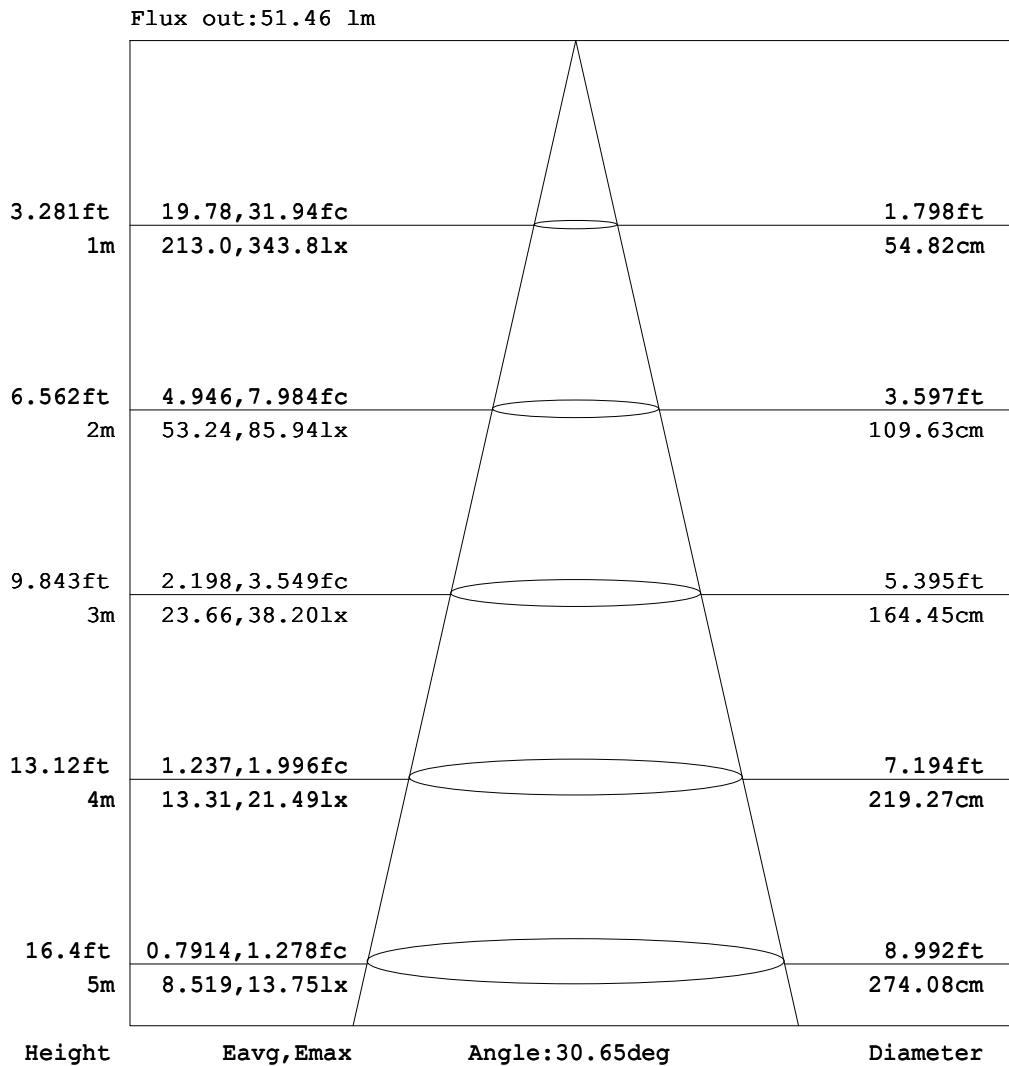
Imax:354.1 (H=4.0,V=10.0)
 (At:C=115.0,Gamma=11.0)
 UNIT: cd

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-09-09

γ Range: 0 - 90DEG
 γ UnUerval: 0.5DEG
 Humidity:65.0%
 Remarks: 8/20 LENS

AAI Figure

Test:U:0V I:0A P:0W PF:0 Lamp Flux:119.645x1 lm		
NAM : REL35	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019090901
MFR.:	SUR.:0.008	PROTECTION ANGLE:



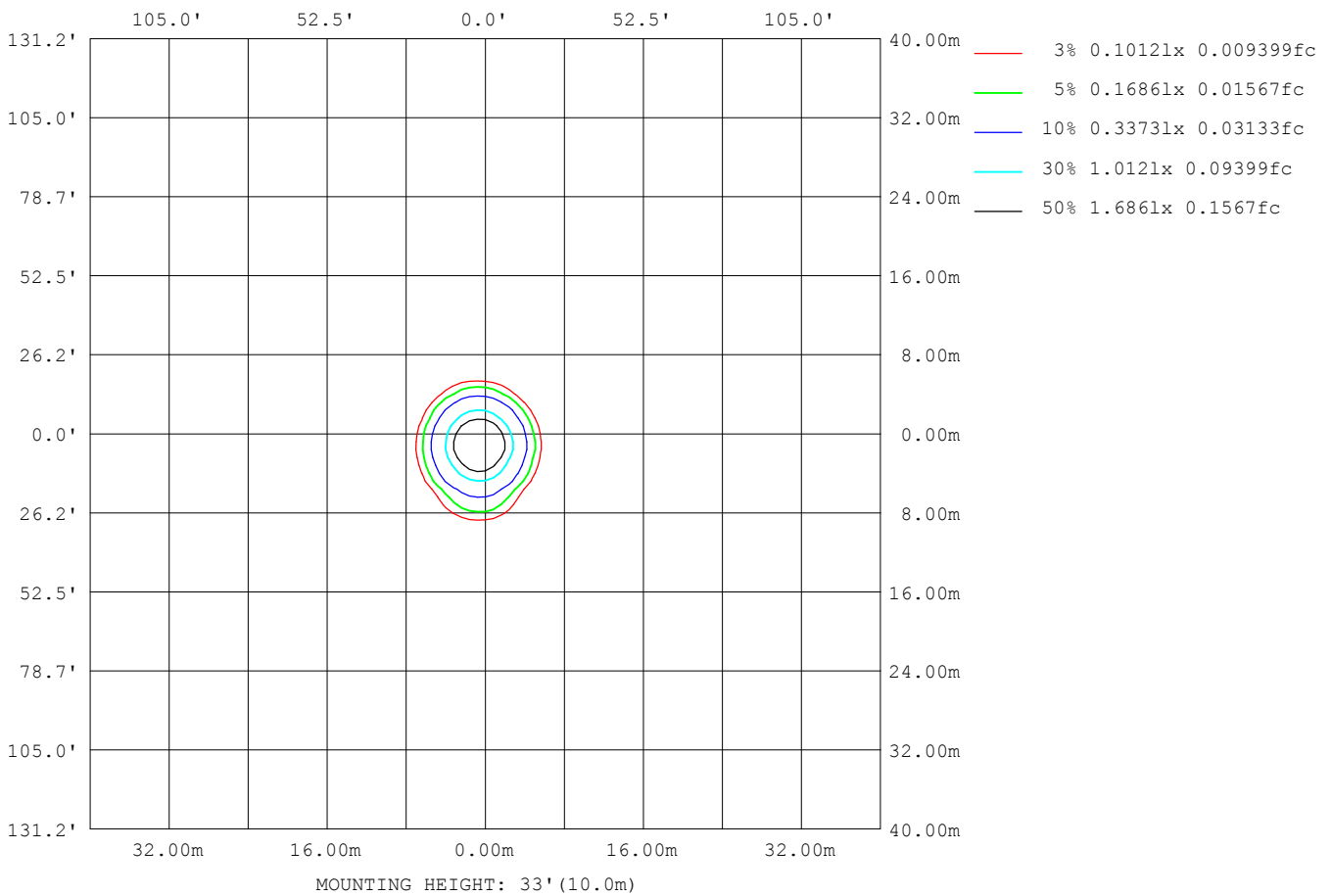
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-09-09

γ Range: 0 - 90DEG
 γ UnUerval: 0.5DEG HumidiUy:65.0%
 Remarks: 8/20 LENS

ISOLUX DIAGRAM

Test:U:0V I:0A P:0W PF:0 Lamp Flux:119.645x1 lm		
NAM : REL35	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019090901
MFR.:	SUR.:0.008	PROTECTION ANGLE:

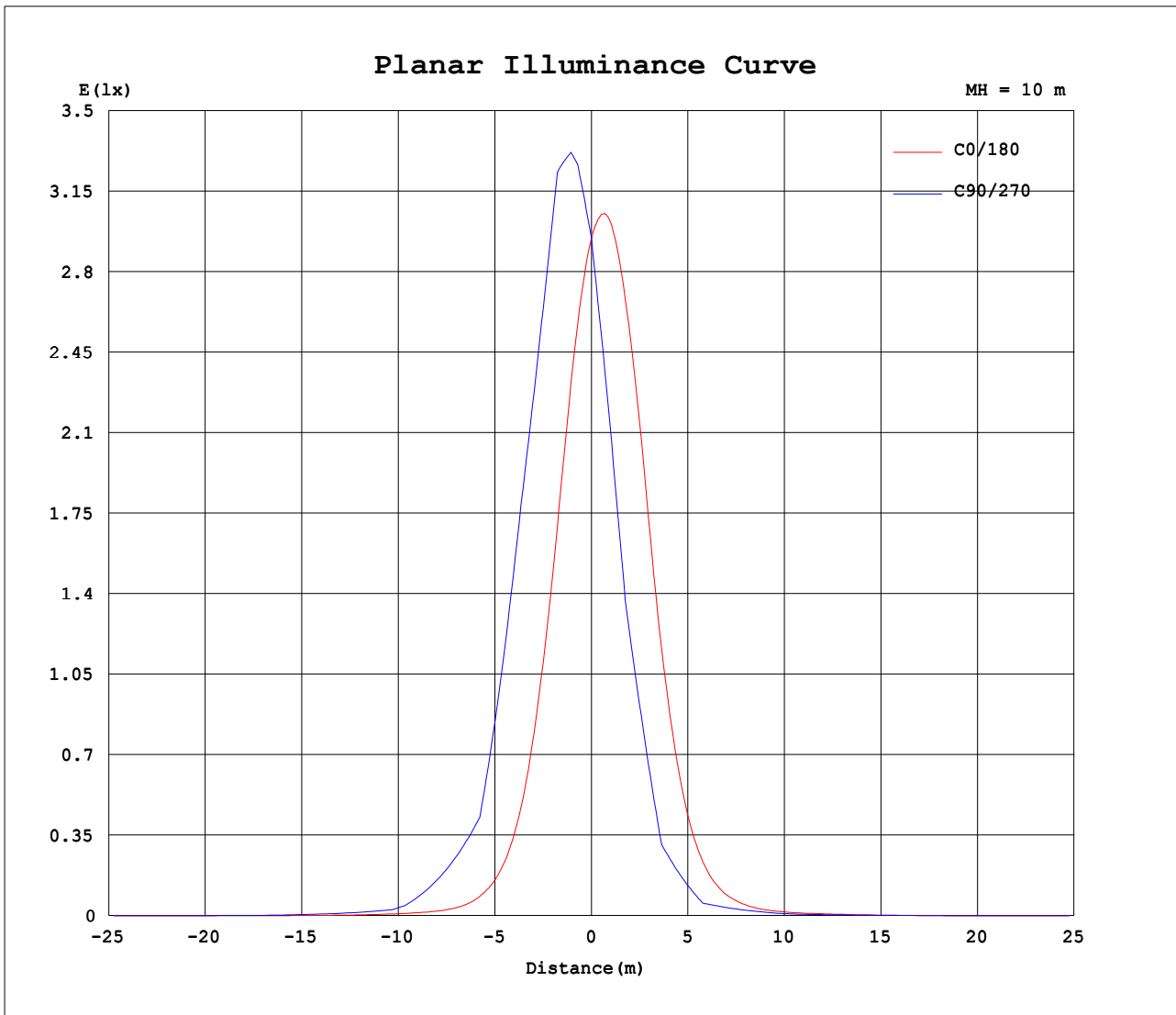


C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-09-09

γ Range: 0 - 90DEG
 γ UnUerval: 0.5DEG
 HumidiUy:65.0%
 Remarks: 8/20 LENS



Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: WLM
Test Date: 2019-09-09

γ Range: 0 - 90DEG
γ UnUerval: 0.5DEG
Humidity: 65.0%
Remarks: 8/20 LENS

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:0V I:0A P:0W PF:0 Lamp Flux:119.645x1 lm		
NAM : REL35	TYPE :	WEIGHT :
SPEC. :	DIM. :	SERIAL No. :2019090901
MFR. :	SUR. :0.008	PROTECTION ANGLE :

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295
5	248	252	256	261	266	271	277	283	289	294	300	306	310	314	319	323	326	330	333
10	177	183	190	198	207	217	225	235	244	254	264	274	284	294	303	313	323	332	338
15	108	114	120	129	137	146	154	165	178	187	196	205	215	225	236	247	258	268	277
20	57.0	60.4	65.4	70.5	75.7	81.9	89.4	95.1	102	109	119	130	142	154	167	180	193	205	216
25	27.5	29.4	32.0	34.5	37.8	40.9	43.7	47.5	52.3	58.2	64.4	72.1	81.9	92.8	103	114	124	133	141
30	13.1	14.2	15.4	16.5	17.6	18.8	20.5	22.6	25.4	28.8	32.7	37.1	41.6	46.7	51.7	55.8	59.5	62.9	66.2
35	6.48	6.95	7.49	8.10	8.50	9.09	10.1	11.1	12.3	13.6	14.8	15.5	18.7	23.1	28.3	33.6	38.8	43.5	46.8
40	3.85	3.98	4.24	4.47	4.64	4.93	5.38	5.84	6.26	6.55	7.73	9.26	11.2	13.8	16.8	19.9	22.9	25.6	27.5
45	2.69	2.75	2.96	3.01	3.12	3.27	3.45	3.70	3.87	4.25	4.80	5.56	6.39	7.15	7.89	8.28	8.96	9.48	9.84
50	1.67	1.68	1.83	1.88	2.00	2.12	2.33	2.42	2.55	2.74	2.99	3.23	3.48	3.81	4.25	4.76	5.27	5.71	5.97
55	0.98	0.96	1.01	1.00	1.13	1.25	1.37	1.45	1.47	1.61	1.88	2.12	2.36	2.57	2.80	3.08	3.40	3.64	3.82
60	0.56	0.56	0.55	0.60	0.71	0.70	0.72	0.76	0.83	0.99	1.17	1.32	1.41	1.46	1.49	1.52	1.59	1.59	1.66
65	0.24	0.24	0.15	0.28	0.29	0.27	0.33	0.40	0.46	0.53	0.63	0.64	0.69	0.73	0.77	0.83	0.92	0.96	1.04
70	0.10	0.09	0.07	0.09	0.06	0.06	0.15	0.16	0.18	0.22	0.27	0.27	0.25	0.27	0.26	0.32	0.34	0.37	0.41
75	0.08	0.04	0.07	0.04	0.05	0.07	0.08	0.06	0.06	0.05	0.03	0.03	0.03	0.10	0.12	0.20	0.24	0.28	0.32
80	0.05	0.05	0.03	0.05	0.06	0.04	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.07	0.09	0.14	0.17	0.20	0.23
85	0.04	0.03	0.05	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.06	0.07	0.09	0.11	0.12	0.13
90	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-09-09

γ Range: 0 - 90DEG
 γ UnUerval: 0.5DEG
 HumidiUy:65.0%
 Remarks: 8/20 LENS

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:0V I:0A P:0W PF:0 Lamp Flux:119.645x1 lm		
NAM : REL35	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019090901
MFR.:	SUR.:0.008	PROTECTION ANGLE:

Table--2

UNIT: cd

γ (DEG) \ C (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295
5	335	338	339	341	341	342	342	340	338	336	333	330	326	322	319	315	311	307	301
10	344	348	351	353	354	353	351	349	345	341	336	329	322	313	304	296	288	281	269
15	284	291	296	300	302	304	305	305	305	302	291	281	272	263	252	240	229	221	206
20	224	229	231	232	231	228	224	220	215	211	207	204	192	181	171	160	148	140	128
25	147	152	154	155	154	151	146	139	133	127	121	115	110	103	95.0	88.2	81.3	76.4	69.0
30	69.4	73.1	76.9	80.4	82.2	82.2	80.1	76.6	71.8	65.9	60.8	56.4	52.6	50.1	46.2	42.5	38.9	36.3	32.6
35	48.4	48.6	47.5	45.1	41.3	37.0	33.2	34.6	33.7	31.3	28.6	26.1	24.1	22.4	21.2	19.3	17.8	16.7	15.2
40	28.6	29.0	28.6	27.2	25.1	22.4	19.6	17.1	14.7	14.2	13.6	12.6	11.5	10.6	10.1	9.37	8.68	8.24	7.60
45	10.3	10.7	10.9	11.7	12.1	11.7	11.0	9.92	8.84	7.79	7.04	6.77	6.41	6.02	5.59	5.29	4.99	4.75	4.56
50	6.10	6.10	5.82	5.52	5.28	5.15	5.45	5.65	5.43	5.04	4.63	4.38	4.23	4.06	3.88	3.67	3.61	3.42	3.35
55	3.90	3.94	3.82	3.70	3.61	3.57	3.52	3.50	3.46	3.33	3.12	3.00	2.91	2.81	2.77	2.53	2.43	2.27	2.21
60	1.70	1.81	1.92	1.99	2.06	2.14	2.22	2.26	2.24	2.10	1.90	1.82	1.77	1.59	1.54	1.45	1.34	1.25	1.21
65	1.06	1.10	1.11	1.12	1.09	1.06	1.03	1.14	1.23	1.21	1.10	1.05	1.02	0.91	0.85	0.89	0.74	0.69	0.65
70	0.45	0.50	0.54	0.59	0.63	0.64	0.62	0.59	0.57	0.52	0.52	0.51	0.52	0.50	0.40	0.38	0.33	0.26	0.26
75	0.34	0.37	0.38	0.38	0.40	0.37	0.31	0.25	0.23	0.22	0.22	0.12	0.11	0.17	0.14	0.04	0.11	0.03	0.11
80	0.24	0.26	0.26	0.27	0.28	0.26	0.21	0.17	0.13	0.10	0.10	0.08	0.07	0.04	0.05	0.07	0.05	0.03	0.04
85	0.14	0.15	0.15	0.16	0.16	0.15	0.13	0.10	0.09	0.07	0.07	0.06	0.06	0.07	0.06	0.04	0.06	0.03	0.07
90	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.21

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-09-09

γ Range: 0 - 90DEG
 γ UnUerval: 0.5DEG
 HumidiUy:65.0%
 Remarks: 8/20 LENS



LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:0V I:0A P:0W PF:0 Lamp Flux:119.645x1 lm		
NAM : REL35	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2019090901
MFR.:	SUR.:0.008	PROTECTION ANGLE:

Table--3

UNIT: cd

C (DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295
5	295	289	283	277	272	267	262	257	253	249	244	240	236	233	230	227	224	222	220
10	258	248	239	230	221	212	203	195	187	180	172	166	160	155	151	147	143	140	138
15	194	182	172	162	152	142	132	127	122	118	113	108	104	100.0	96.4	93.3	90.4	87.6	85.3
20	119	110	102	94.0	87.1	83.8	80.4	76.6	72.3	67.4	62.0	56.4	51.0	46.2	42.0	39.1	37.4	36.6	36.5
25	63.1	57.9	52.9	49.4	47.3	44.6	41.2	36.7	31.0	29.3	29.0	28.3	27.3	26.2	25.0	23.9	23.0	22.0	21.1
30	29.8	27.3	25.5	24.3	22.8	20.4	17.4	17.3	17.0	16.5	15.6	14.4	12.8	11.3	9.97	9.08	8.56	8.28	8.33
35	14.1	13.0	12.3	11.4	10.0	9.62	9.49	9.12	8.15	6.72	6.80	6.98	7.06	7.04	6.93	6.79	6.57	6.17	5.77
40	7.06	6.71	6.33	5.69	5.58	5.42	4.93	4.33	4.53	4.75	4.95	5.08	5.09	5.00	4.87	4.73	4.58	4.34	4.11
45	4.27	4.14	3.92	3.73	3.62	3.34	3.25	3.23	3.25	3.36	3.41	3.37	3.24	3.02	2.90	2.80	2.73	2.68	2.60
50	3.14	3.00	2.83	2.63	2.51	2.44	2.35	2.29	2.25	2.25	2.23	2.24	2.21	2.15	2.09	2.04	2.00	1.98	1.93
55	2.05	1.96	1.77	1.65	1.70	1.65	1.56	1.48	1.52	1.58	1.61	1.61	1.60	1.54	1.48	1.44	1.41	1.40	1.39
60	1.18	1.10	0.98	1.00	1.04	1.01	0.98	1.01	1.02	1.05	1.04	1.00	0.97	0.92	0.87	0.84	0.83	0.84	0.87
65	0.70	0.57	0.57	0.59	0.61	0.63	0.61	0.59	0.57	0.57	0.61	0.61	0.62	0.62	0.61	0.59	0.59	0.59	0.60
70	0.24	0.23	0.27	0.31	0.34	0.32	0.31	0.37	0.42	0.44	0.45	0.43	0.41	0.39	0.38	0.36	0.35	0.35	0.35
75	0.03	0.13	0.15	0.17	0.20	0.28	0.35	0.36	0.36	0.35	0.34	0.34	0.33	0.33	0.33	0.32	0.32	0.31	0.30
80	0.09	0.13	0.17	0.27	0.34	0.34	0.33	0.32	0.31	0.31	0.30	0.30	0.29	0.29	0.29	0.28	0.28	0.27	0.26
85	0.17	0.26	0.27	0.27	0.27	0.28	0.27	0.27	0.26	0.26	0.26	0.26	0.25	0.25	0.25	0.24	0.24	0.23	0.23
90	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.20	0.20	0.19	0.19

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-09-09

γ Range: 0 - 90DEG
 γ UnUerval: 0.5DEG
 HumidiUy:65.0%
 Remarks: 8/20 LENS

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:0V I:0A P:0W PF:0 Lamp Flux:119.645x1 lm		
NAM : REL35	TYPE :	WEIGHT :
SPEC. :	DIM. :	SERIAL No.:2019090901
MFR. :	SUR. :0.008	PROTECTION ANGLE :

Table--4

UNIT: cd

γ (DEG) \ C (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	295	295	295	295	295	295	295	295	295	295	295	295	295	295	295				
5	219	218	218	217	218	218	219	221	222	225	227	231	234	238	243				
10	137	136	135	136	136	138	139	141	144	146	150	154	158	164	170				
15	83.2	81.5	80.1	79.0	77.8	76.7	75.7	75.8	78.7	81.8	85.1	88.5	92.4	96.6	102				
20	37.0	37.8	38.7	39.3	39.7	39.9	39.9	39.9	39.9	39.9	41.9	44.4	47.0	49.7	52.9				
25	20.2	19.3	18.4	17.4	16.6	16.6	18.2	19.1	19.5	19.7	20.0	20.9	22.4	23.9	25.4				
30	8.62	8.94	9.13	9.16	9.16	9.02	8.67	8.14	8.79	9.47	9.88	10.1	10.6	11.5	12.2				
35	5.41	5.04	4.63	4.36	4.21	4.73	4.85	4.86	4.64	4.63	5.03	5.28	5.47	5.72	6.06				
40	3.90	3.67	3.42	3.23	3.13	3.07	3.09	3.15	3.13	3.12	3.16	3.30	3.44	3.55	3.66				
45	2.53	2.48	2.38	2.29	2.24	2.25	2.25	2.25	2.26	2.23	2.22	2.30	2.38	2.52	2.51				
50	1.86	1.76	1.64	1.51	1.44	1.47	1.50	1.51	1.48	1.41	1.40	1.39	1.40	1.53	1.53				
55	1.35	1.30	1.21	1.11	1.04	0.96	0.89	0.89	0.88	0.87	0.87	0.84	0.79	0.88	0.89				
60	0.86	0.85	0.81	0.77	0.73	0.68	0.63	0.55	0.47	0.45	0.47	0.49	0.43	0.44	0.52				
65	0.58	0.56	0.53	0.51	0.47	0.47	0.45	0.40	0.32	0.21	0.18	0.21	0.20	0.11	0.21				
70	0.35	0.35	0.36	0.37	0.35	0.34	0.33	0.35	0.30	0.22	0.15	0.10	0.12	0.08	0.08				
75	0.29	0.28	0.28	0.28	0.28	0.24	0.23	0.24	0.25	0.25	0.23	0.16	0.10	0.10	0.05				
80	0.26	0.25	0.25	0.25	0.24	0.22	0.20	0.20	0.19	0.19	0.20	0.21	0.18	0.10	0.06				
85	0.23	0.22	0.22	0.23	0.21	0.20	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.10				
90	0.19	0.19	0.19	0.20	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18				

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2019-09-09

γ Range: 0 - 90DEG
 γ UnUerval: 0.5DEG
 Remarks: 8/20 LENS