

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P997704

Luminaire Tested: SA2XXRDP-B290DB27-4F0-XX-W2A-A

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997704
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-29)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDP-B290DB27-4F0-XX-W2A-A
Description: Define 2 Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

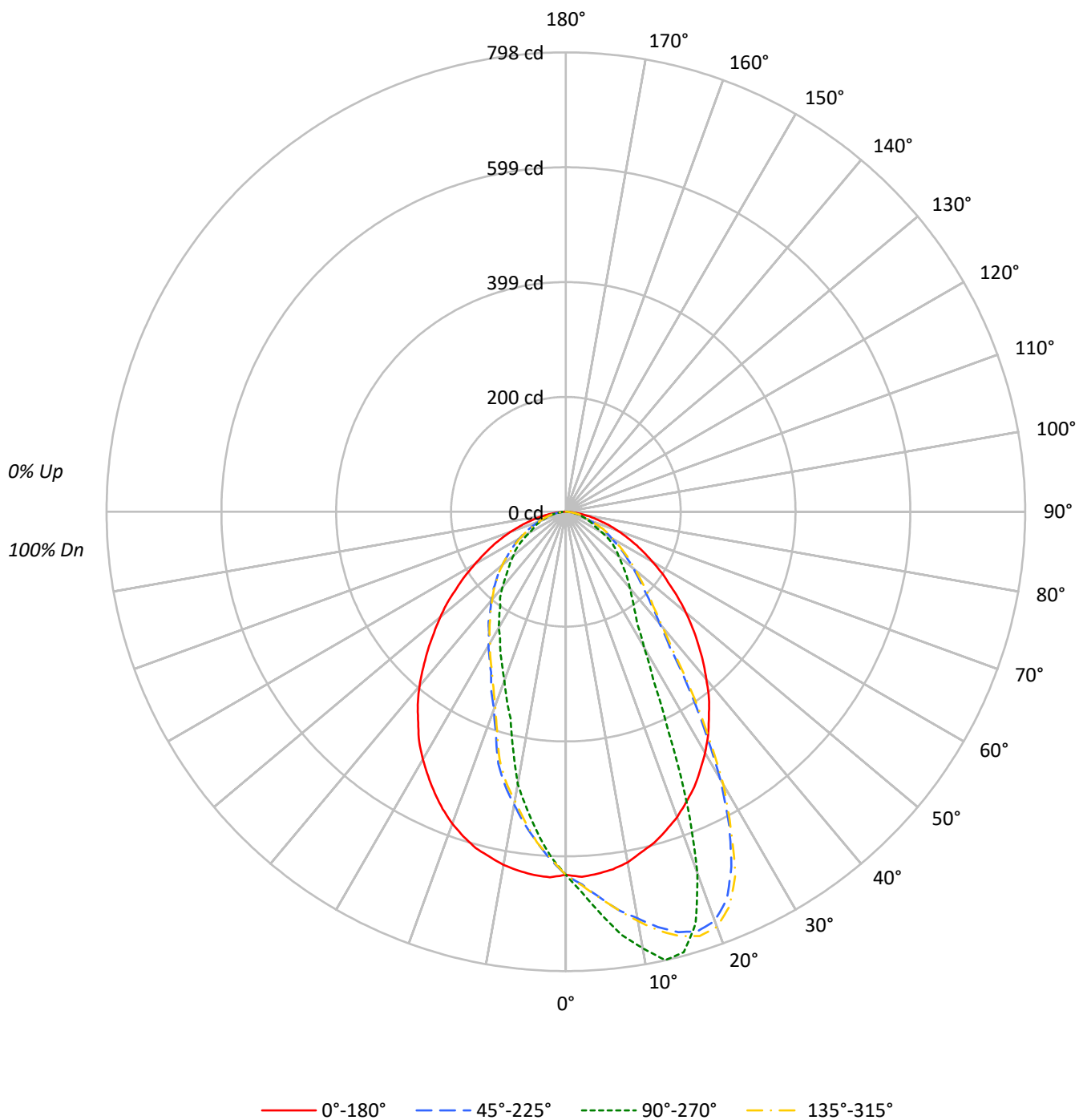
Lumens per Lamp: N/A
Luminaire Lumens: 1090.0 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 13
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87		
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76		
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66		
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	59		
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52		
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47		
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	42		
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	39		
9	62	50	43	38	61	50	42	37	49	42	37	47	41	37	47	41	37	35		
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9984	9984	9984	9984
5°	10030	11150	10065	8908
10°	9941	12372	10012	7722
15°	9747	12979	9913	6085
20°	9511	11253	9716	5264
25°	9217	7379	9416	4700
30°	8837	4968	9077	4253
35°	8369	4023	8640	3838
40°	7844	3577	8179	3550
45°	7280	3237	7584	3170
50°	6703	2948	7016	2935
55°	6060	2771	6386	2735
60°	5496	2317	5787	2289
65°	4974	1955	5270	2217
70°	4401	1805	4749	2087
75°	3804	1688	4153	1933
80°	3154	1559	3400	1714
85°	2470	1435	2706	1507

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 160°

Vertical Angle: 45°

Luminance: 10960 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.8	5.5
10°-20°	167.0	15.3
20°-30°	214.9	19.7
30°-40°	203.9	18.7
40°-50°	174.7	16.0
50°-60°	133.1	12.2
60°-70°	83.9	7.7
70°-80°	41.9	3.8
80°-90°	10.8	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	441.7	40.5
0°-40°	645.6	59.2
0°-60°	953.4	87.5
0°-90°	1090.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1090.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	631	631	631	631	631	
5°	631	702	633	561	631	60
15°	595	792	605	371	595	167
25°	528	422	539	269	528	242
35°	433	208	447	199	433	271
45°	325	145	339	142	325	251
55°	220	100	231	99	220	198
65°	133	52	141	59	133	132
75°	62	28	68	32	62	67
85°	14	8	15	8	14	16
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7
2.5°	634.7	637.3	638.6	640.4	644.3	647.0	650.9	651.8	651.3	653.1	648.3
5°	631.2	636.9	642.1	646.5	653.5	657.9	662.7	668.4	669.8	676.3	672.4
7.5°	626.4	634.7	642.1	650.9	661.4	667.1	674.6	683.3	687.3	695.2	697.4
10°	618.5	630.3	643.0	652.2	666.7	676.8	683.8	697.8	707.0	718.8	717.1
12.5°	605.8	621.1	638.2	653.5	672.4	679.0	692.1	706.6	718.4	729.4	739.0
15°	594.8	612.3	631.2	650.0	671.5	683.8	696.9	715.8	728.5	747.8	756.1
17.5°	579.9	602.3	624.6	645.6	671.1	685.1	701.3	719.7	738.6	757.0	763.6
20°	564.6	588.7	612.8	641.3	670.2	683.8	700.4	723.2	741.6	756.1	756.1
22.5°	546.1	575.5	603.1	630.3	661.9	681.6	698.7	725.4	738.6	741.6	729.8
25°	527.7	557.1	587.3	621.1	657.0	674.6	693.9	718.8	723.2	711.0	680.3
27.5°	505.8	538.7	572.9	609.3	647.0	668.9	686.4	703.1	694.7	661.9	614.1
30°	483.5	519.0	557.5	592.2	637.8	657.9	672.8	677.6	651.3	597.9	536.1
32.5°	460.2	494.9	535.6	577.3	623.3	642.6	652.2	639.5	591.3	523.8	448.4
35°	433.1	472.1	514.6	558.0	603.6	618.0	623.7	592.6	530.8	443.6	368.6
37.5°	408.5	447.5	493.1	537.4	581.6	589.5	583.8	535.2	456.7	370.4	297.2
40°	379.6	421.2	465.9	515.5	551.8	554.0	540.0	476.9	379.6	298.5	253.3
42.5°	352.8	394.9	439.6	490.0	517.7	510.2	491.4	408.5	316.9	257.3	220.9
45°	325.2	365.1	413.3	458.0	477.8	460.2	431.7	343.6	266.1	221.4	193.3
47.5°	298.5	335.8	383.5	426.5	430.0	410.3	376.5	288.0	230.6	194.6	171.8
50°	272.2	309.5	354.2	389.7	386.2	359.0	320.8	250.3	200.3	171.8	153.0
52.5°	245.9	279.6	323.0	351.1	336.2	309.9	272.2	212.1	174.9	149.9	135.4
55°	219.6	251.2	288.4	311.6	288.0	257.7	231.0	181.9	151.7	131.5	120.5
57.5°	197.7	222.7	256.9	270.9	242.4	218.7	195.5	156.5	131.5	117.0	104.3
60°	173.6	196.4	224.4	232.7	203.4	184.1	164.4	132.4	112.6	99.9	91.6
62.5°	153.0	171.8	193.3	193.3	167.4	153.0	138.1	110.9	94.7	84.6	80.7
65°	132.8	146.4	161.7	160.0	138.1	125.4	113.5	91.6	79.3	72.3	68.4
67.5°	113.1	123.6	133.7	127.6	111.8	100.8	89.9	74.1	65.7	60.9	55.7
70°	95.1	103.4	108.7	103.0	87.2	78.0	70.1	59.6	53.0	46.9	43.8
72.5°	79.8	83.3	85.0	78.0	64.9	59.6	53.9	46.5	40.8	37.7	36.8
75°	62.2	65.3	64.0	58.7	47.8	43.8	39.4	34.2	32.9	31.1	30.2
77.5°	48.7	48.7	46.5	41.6	34.2	31.1	29.4	26.7	25.4	25.0	24.1
80°	34.6	34.2	32.9	27.6	23.2	21.5	21.5	19.7	19.3	18.4	18.4
82.5°	22.8	22.8	21.0	16.7	15.3	14.9	14.5	13.6	13.6	13.1	13.1
85°	13.6	12.7	10.5	9.2	8.8	8.8	8.3	7.9	8.3	7.9	7.9
87.5°	6.1	4.8	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7
2.5°	653.1	654.0	655.3	661.4	662.3	664.1	663.2	663.2	663.6	662.7	663.2
5°	681.1	682.5	689.0	696.5	698.2	696.5	698.7	701.7	701.7	701.7	700.9
7.5°	707.4	712.3	719.7	730.7	732.9	735.1	739.0	736.4	737.3	741.2	739.9
10°	732.9	739.9	748.2	757.4	762.2	765.3	767.1	771.0	780.2	769.7	773.6
12.5°	757.0	767.1	775.8	785.9	789.4	793.4	794.7	798.2	798.2	797.7	800.8
15°	772.8	782.0	789.9	796.4	797.3	796.4	795.5	796.0	797.3	792.0	795.1
17.5°	776.3	777.1	779.8	777.1	777.6	768.4	763.1	761.8	749.5	750.0	760.0
20°	759.2	744.3	740.3	725.9	717.1	693.4	692.5	686.0	660.1	668.0	666.2
22.5°	712.3	686.8	653.1	636.4	628.1	603.1	583.8	570.3	561.0	551.8	547.9
25°	650.5	609.3	561.5	528.6	523.8	500.6	465.1	448.4	428.7	422.5	433.1
27.5°	570.7	517.2	463.3	412.9	403.7	382.7	364.7	352.8	330.1	328.7	329.6
30°	462.4	408.5	363.4	330.5	307.7	298.1	286.2	277.5	268.3	271.8	272.6
32.5°	380.0	328.7	286.7	269.1	258.6	252.5	242.4	236.7	232.7	231.4	231.0
35°	302.0	267.8	249.0	231.9	225.7	221.4	213.9	211.3	207.8	208.2	208.2
37.5°	258.6	230.1	216.1	207.3	201.6	199.4	194.6	192.0	189.8	188.9	190.2
40°	223.1	203.4	194.6	186.7	181.9	181.0	178.4	175.3	172.7	173.1	174.5
42.5°	197.2	185.8	175.3	169.2	165.7	164.4	162.2	160.0	160.0	158.7	158.2
45°	176.6	167.4	158.7	153.0	150.8	149.0	146.4	146.0	144.2	144.6	145.1
47.5°	158.2	150.8	144.2	138.5	136.3	135.9	133.2	131.5	131.5	131.1	130.6
50°	141.6	134.1	128.4	125.4	122.3	121.4	121.0	120.5	119.7	119.7	120.1
52.5°	128.0	120.5	116.2	113.5	111.8	110.9	110.9	110.5	110.5	110.5	110.0
55°	113.1	106.9	103.4	102.6	101.7	101.3	100.8	99.9	99.5	100.4	99.5
57.5°	99.1	96.9	93.8	92.9	90.7	90.7	89.4	88.5	87.7	88.5	88.5
60°	88.1	85.0	83.3	80.7	78.9	77.1	75.0	74.5	73.6	73.2	72.8
62.5°	76.7	74.1	69.7	65.7	63.1	61.4	60.5	60.0	60.0	59.6	59.6
65°	64.0	57.9	55.7	54.4	53.9	53.5	52.6	52.2	52.6	52.2	52.6
67.5°	50.0	49.1	47.8	46.9	46.5	46.0	46.0	45.6	45.6	45.6	45.6
70°	43.4	41.2	40.8	39.9	39.9	39.4	39.4	39.4	39.4	39.0	39.9
72.5°	35.9	34.6	34.2	33.8	33.8	33.8	33.3	33.3	33.3	32.9	33.3
75°	29.4	28.9	28.1	28.1	27.6	28.1	27.6	27.6	27.2	27.6	27.6
77.5°	23.7	23.2	22.8	22.8	22.4	22.4	22.4	22.4	22.4	22.4	22.8
80°	18.0	17.5	17.1	17.5	17.1	17.5	17.1	17.1	17.5	17.1	17.1
82.5°	13.1	12.7	12.7	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
85°	7.9	7.5	7.5	7.9	7.5	7.9	7.5	7.5	7.5	7.9	7.9
87.5°	3.5	3.9	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7
2.5°	664.9	661.9	661.0	661.9	661.0	661.4	658.4	647.0	650.0	645.2	647.8
5°	702.6	700.0	694.3	693.4	692.5	691.7	687.3	677.2	673.3	666.7	666.2
7.5°	738.6	738.6	734.2	731.1	727.2	724.1	718.4	703.5	697.4	689.5	685.1
10°	774.1	762.7	767.5	764.4	754.8	753.0	742.5	733.7	721.9	714.0	707.0
12.5°	799.5	796.0	791.6	789.0	786.3	780.6	773.6	751.3	745.1	729.4	721.5
15°	798.6	796.4	797.7	797.7	796.9	795.5	789.9	773.6	763.1	747.8	734.2
17.5°	755.7	761.4	767.1	771.0	779.8	783.7	789.0	779.3	772.8	759.6	745.1
20°	680.7	694.7	711.4	714.9	722.8	746.0	756.5	764.9	767.5	763.1	751.3
22.5°	576.4	588.2	628.6	627.7	639.1	666.7	697.4	722.4	742.1	753.0	748.6
25°	451.5	468.1	489.6	505.8	543.1	584.3	622.4	662.3	696.5	726.7	734.2
27.5°	341.5	363.4	380.5	401.9	420.8	469.4	518.5	580.8	620.7	678.1	707.9
30°	276.1	286.2	303.3	313.4	322.6	359.9	415.5	476.9	547.0	613.2	664.5
32.5°	235.8	242.8	255.5	259.9	269.6	294.6	329.6	385.7	458.0	538.3	605.8
35°	211.7	219.2	221.8	225.7	233.6	249.4	273.5	314.3	379.6	458.0	538.7
37.5°	191.1	195.1	202.5	205.1	207.8	219.6	235.8	264.3	307.7	372.1	461.6
40°	176.6	178.8	182.8	185.0	186.7	195.1	209.5	228.8	260.8	309.9	392.3
42.5°	161.3	163.9	166.6	169.2	171.4	178.0	186.7	205.1	226.6	263.9	323.5
45°	146.4	148.2	151.2	153.0	156.0	161.3	169.2	181.9	201.2	224.9	273.1
47.5°	132.8	135.0	136.3	138.5	140.7	146.4	153.9	162.2	178.0	201.2	236.3
50°	120.5	123.2	124.9	125.4	127.1	132.4	138.5	147.7	157.8	175.8	206.4
52.5°	111.8	112.2	113.5	115.3	114.8	117.9	123.6	130.6	141.1	155.6	178.0
55°	101.7	103.0	103.9	104.3	104.3	106.9	110.0	116.6	124.9	136.8	155.6
57.5°	89.0	90.3	92.9	93.8	95.1	96.4	97.7	102.1	109.1	120.5	135.9
60°	75.8	76.7	79.3	81.1	82.0	85.5	87.2	90.7	94.7	103.0	117.5
62.5°	60.9	61.8	63.1	64.9	66.6	71.9	76.3	79.8	82.8	88.5	100.4
65°	53.0	53.5	54.4	54.8	55.2	57.4	61.4	66.2	71.9	76.3	83.3
67.5°	46.0	46.5	46.9	47.8	48.2	48.7	50.4	51.7	57.4	63.6	68.8
70°	39.4	40.3	40.8	40.8	41.2	42.1	43.0	44.7	46.5	49.5	56.1
72.5°	33.3	33.8	34.6	34.6	34.6	35.5	36.4	37.3	38.1	39.9	42.5
75°	27.6	28.5	28.5	28.5	28.9	28.9	29.8	30.7	31.6	32.9	33.8
77.5°	22.8	22.8	22.8	22.8	23.2	23.2	23.7	24.5	25.0	25.4	26.3
80°	17.1	17.5	17.5	17.5	18.0	18.0	18.0	18.8	19.3	19.3	20.2
82.5°	12.7	12.7	12.7	13.1	12.7	13.1	13.1	13.6	13.1	13.6	14.0
85°	7.9	7.9	7.9	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.8
87.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	4.4	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7
2.5°	643.9	641.7	641.7	640.4	640.4	633.4	633.4	635.6	632.9	629.9	625.5
5°	660.5	655.7	654.4	652.7	647.0	638.2	634.7	633.4	628.1	621.5	614.1
7.5°	676.3	668.4	664.5	660.5	653.1	640.8	633.8	629.0	621.1	611.0	601.4
10°	691.7	681.6	671.5	666.7	656.2	640.8	630.7	622.9	611.5	597.9	584.3
12.5°	705.7	684.7	682.9	673.3	657.9	640.4	625.0	613.6	599.2	583.4	567.6
15°	718.0	696.5	686.0	677.2	657.0	635.1	618.9	604.9	585.6	567.6	548.3
17.5°	724.1	700.9	693.9	679.4	658.8	630.3	608.4	591.3	570.3	548.8	526.9
20°	730.2	703.1	691.7	681.6	653.5	621.1	596.6	576.8	553.6	528.2	504.1
22.5°	733.3	703.1	689.5	675.5	648.3	611.0	582.1	558.9	531.7	505.8	476.9
25°	728.0	700.4	684.2	669.8	639.1	598.7	565.4	539.1	510.2	480.8	451.5
27.5°	714.9	694.3	675.5	660.5	626.4	583.0	547.9	518.1	488.3	455.4	425.6
30°	690.4	681.1	666.2	649.6	612.3	568.9	527.3	496.6	463.7	430.9	399.7
32.5°	652.2	660.1	650.5	636.0	595.7	549.7	505.4	474.3	438.3	402.8	374.3
35°	605.8	633.8	628.6	618.5	578.1	529.1	484.8	447.1	411.1	375.2	346.7
37.5°	554.9	597.4	601.8	595.7	558.0	508.0	459.4	422.5	385.7	349.3	320.4
40°	485.2	550.5	564.6	567.2	536.9	482.6	431.7	395.8	359.4	323.9	288.9
42.5°	421.2	503.6	521.2	532.1	510.2	457.6	406.3	366.4	330.5	298.5	263.4
45°	361.2	447.1	475.6	489.6	480.0	429.1	376.1	338.8	305.9	276.6	242.8
47.5°	299.4	385.7	425.6	448.0	448.0	400.2	347.1	310.3	278.8	253.8	224.0
50°	258.2	330.1	371.3	400.6	408.5	370.8	320.8	284.9	255.1	227.9	205.1
52.5°	220.0	284.5	318.7	349.3	372.1	339.3	291.5	259.0	229.7	204.3	186.3
55°	190.2	238.4	269.6	303.3	328.7	307.3	263.0	231.4	206.0	185.0	169.6
57.5°	161.7	203.8	229.2	259.0	286.2	270.0	234.5	207.3	185.0	166.6	153.0
60°	137.6	171.8	191.5	214.8	248.5	237.1	207.8	182.8	164.8	148.2	136.8
62.5°	117.0	144.2	160.9	177.5	208.2	202.9	180.1	160.9	145.5	131.5	121.9
65°	96.0	118.3	131.5	146.0	170.5	172.7	154.3	140.7	126.7	114.4	105.6
67.5°	77.6	95.1	106.9	119.2	138.9	145.1	132.4	121.0	109.1	99.1	91.2
70°	62.7	75.0	83.7	93.4	109.6	117.0	110.5	102.6	92.9	84.6	77.6
72.5°	49.5	57.4	62.7	70.1	83.3	90.7	90.3	83.3	76.3	70.6	64.9
75°	36.4	42.5	46.9	51.7	62.2	69.3	71.0	67.9	60.9	56.5	52.2
77.5°	27.6	31.1	33.3	36.8	44.3	50.4	53.0	52.2	47.3	43.8	40.8
80°	21.0	21.9	22.8	24.1	30.2	35.9	37.7	37.3	34.6	33.3	29.8
82.5°	14.9	15.3	15.8	16.2	18.4	23.2	25.0	25.9	23.7	22.4	19.3
85°	8.8	9.2	9.2	10.1	10.5	11.8	14.9	14.9	14.5	12.7	12.3
87.5°	4.4	4.4	3.9	3.9	4.4	4.8	5.7	6.6	5.7	5.3	4.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P997704

CATALOG NUMBER: SA2XXRDP-B290DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7
2.5°	623.7	624.2	625.5	621.5	615.4	612.8	604.9	603.6	602.3	602.3	603.6
5°	609.7	607.9	608.4	600.9	592.2	586.9	576.0	577.7	572.0	568.5	569.4
7.5°	594.4	589.5	589.1	579.5	568.5	558.9	547.5	544.8	539.6	533.4	530.8
10°	575.1	571.6	565.0	554.0	540.0	532.1	516.8	507.6	506.3	497.1	493.5
12.5°	555.4	549.2	542.6	527.3	511.5	498.8	487.4	477.3	470.3	462.4	457.2
15°	532.6	525.1	517.7	501.4	483.0	470.3	453.2	438.3	417.7	401.5	392.3
17.5°	507.6	499.2	489.2	471.2	453.2	435.7	404.1	386.6	372.1	362.5	356.8
20°	481.7	472.5	462.4	444.5	413.3	382.7	365.1	351.5	342.8	333.1	326.1
22.5°	454.5	444.9	433.9	405.9	373.0	351.5	337.9	325.2	312.5	307.3	303.8
25°	429.1	420.3	406.3	368.2	342.3	322.6	307.3	298.9	292.4	285.3	278.8
27.5°	402.8	386.6	366.9	334.9	318.7	298.5	287.5	281.4	270.0	265.2	262.1
30°	371.3	353.3	334.4	311.6	292.8	278.8	268.7	258.6	252.0	247.2	242.0
32.5°	339.3	322.2	310.3	286.7	272.6	258.2	248.5	242.4	232.7	229.7	227.5
35°	311.6	297.2	286.7	267.4	254.2	241.1	234.1	224.9	218.7	213.0	209.5
37.5°	284.5	276.6	265.6	249.4	235.4	224.9	215.2	212.1	203.8	200.8	197.2
40°	265.6	253.8	244.6	230.6	218.7	207.3	201.2	194.2	188.5	183.7	182.3
42.5°	242.8	234.1	228.8	213.5	201.2	194.6	187.2	179.3	174.9	170.9	166.1
45°	225.7	217.8	210.4	198.1	187.2	178.8	172.3	167.0	159.5	157.8	150.3
47.5°	207.8	199.9	194.2	181.9	171.8	163.9	159.1	152.1	146.0	142.0	138.5
50°	189.8	183.2	178.0	167.4	158.7	150.3	143.8	136.8	134.1	127.6	125.4
52.5°	172.7	168.3	162.6	152.5	143.8	136.8	129.7	124.0	120.1	116.6	114.0
55°	158.2	151.2	148.6	137.6	130.2	122.7	116.6	113.1	108.3	106.1	103.9
57.5°	142.0	138.1	133.7	125.4	117.0	110.0	105.6	100.4	97.7	95.1	93.4
60°	128.0	122.3	118.8	111.8	104.3	97.7	93.8	89.9	86.3	84.2	80.7
62.5°	111.8	107.4	105.2	97.7	91.6	85.5	82.0	78.0	75.4	71.4	67.1
65°	97.7	94.2	91.6	85.5	79.8	74.1	70.6	65.7	62.2	60.0	59.6
67.5°	85.5	82.8	78.9	73.2	67.5	63.1	59.2	55.2	54.8	53.9	53.9
70°	71.9	69.3	67.1	60.9	56.1	51.3	50.4	49.1	47.8	47.3	46.5
72.5°	60.0	57.9	55.2	50.0	45.1	43.8	43.0	42.1	40.8	40.3	39.9
75°	48.7	45.6	43.8	39.0	37.7	36.8	35.9	34.6	33.8	33.3	32.4
77.5°	37.3	34.2	34.2	31.6	30.7	29.4	28.5	27.6	27.2	26.3	26.3
80°	26.3	26.3	25.4	24.1	22.8	22.4	21.0	20.6	20.2	20.6	19.7
82.5°	19.3	17.5	17.5	16.7	15.8	15.3	14.5	14.5	14.0	14.0	14.0
85°	11.0	11.0	10.5	9.6	9.2	9.2	8.8	8.8	8.3	8.3	7.9
87.5°	4.4	3.9	4.4	3.9	3.9	3.5	3.5	3.5	3.1	3.5	3.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P997704

CATALOG NUMBER: SA2XXRDP-B290DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7
2.5°	603.6	602.7	600.1	600.9	599.6	599.6	598.7	598.7	598.7	600.9	599.6
5°	570.7	567.6	564.6	563.2	561.9	560.6	560.6	560.2	564.1	563.2	566.7
7.5°	529.9	529.1	522.9	522.9	520.7	519.8	522.0	522.5	522.9	523.8	526.0
10°	493.5	491.4	482.6	483.5	482.2	480.4	481.7	480.8	483.9	484.8	483.9
12.5°	450.6	446.6	437.0	432.2	426.9	423.0	427.8	424.3	436.6	440.1	449.7
15°	393.6	386.2	379.6	379.6	374.8	371.3	373.4	377.4	380.0	384.0	385.7
17.5°	355.5	352.4	347.1	344.1	342.8	341.5	341.5	343.2	348.9	348.5	352.0
20°	323.0	321.3	318.7	314.7	313.4	312.5	312.5	312.5	316.5	320.0	322.2
22.5°	300.7	299.4	297.6	292.4	289.7	288.9	291.0	292.4	295.4	298.1	300.2
25°	278.3	275.3	272.2	270.4	269.1	269.1	270.0	270.4	271.8	273.1	275.7
27.5°	259.9	257.7	253.3	248.5	248.5	247.2	248.1	249.0	252.0	256.4	258.6
30°	239.3	238.9	237.1	235.4	233.6	232.7	234.5	235.8	236.3	238.4	238.4
32.5°	224.4	221.4	218.3	216.5	215.7	215.2	215.7	217.4	217.4	220.0	223.1
35°	209.5	207.8	204.7	201.6	200.8	198.6	200.3	202.1	205.1	206.4	207.8
37.5°	193.3	191.1	189.8	188.9	187.2	187.6	186.3	188.9	191.5	191.1	192.0
40°	181.0	177.1	173.1	172.7	172.3	171.8	171.8	172.3	174.0	175.8	178.4
42.5°	165.2	163.9	160.4	156.9	156.0	155.2	154.3	156.0	159.5	162.6	163.9
45°	149.0	147.3	146.4	143.8	142.0	141.6	140.7	142.9	146.0	147.3	148.2
47.5°	134.1	133.7	131.1	131.5	130.2	130.6	130.2	131.5	131.5	132.8	133.7
50°	124.0	122.7	121.4	120.5	119.2	119.2	118.8	119.2	121.0	122.7	122.3
52.5°	114.0	111.8	111.3	110.9	110.0	110.9	109.6	110.0	111.8	112.6	112.2
55°	102.1	101.7	100.8	99.9	99.5	99.1	99.1	99.1	100.8	102.1	102.6
57.5°	92.9	90.7	89.0	89.0	87.2	86.8	87.7	88.1	89.4	90.3	91.2
60°	80.2	79.3	76.7	75.4	72.8	72.3	72.3	74.1	76.3	79.3	80.2
62.5°	66.6	65.3	64.9	64.9	64.9	64.9	64.9	64.9	64.9	65.3	65.3
65°	59.2	59.6	59.2	58.7	59.2	59.2	58.7	58.7	58.7	59.2	59.6
67.5°	53.0	52.6	53.0	52.6	52.2	52.2	51.7	52.2	52.6	53.0	53.0
70°	46.0	46.0	45.6	46.0	45.6	45.1	44.7	44.7	45.6	46.0	46.0
72.5°	39.4	39.4	39.0	39.0	38.1	38.1	38.6	38.1	38.1	39.4	39.4
75°	32.9	32.4	32.0	32.0	31.6	31.6	31.6	31.1	32.0	32.0	32.4
77.5°	25.9	25.9	25.9	25.4	25.4	25.0	25.0	25.4	25.4	25.4	25.9
80°	19.7	19.7	19.7	19.3	18.8	18.8	18.8	18.8	18.8	19.3	18.8
82.5°	13.6	13.6	13.6	13.6	13.6	13.1	13.1	13.1	13.6	13.6	13.1
85°	8.3	7.9	8.3	8.3	7.9	8.3	7.9	7.9	7.5	7.5	7.9
87.5°	3.5	3.1	2.6	2.6	3.1	2.6	2.6	2.6	3.1	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P997704

CATALOG NUMBER: SA2XXRDP-B290DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7	630.7
2.5°	600.9	603.1	602.3	597.4	602.3	603.6	606.2	608.8	610.6	613.2	615.4
5°	563.2	567.6	570.3	567.6	576.4	577.7	583.8	587.3	592.6	597.0	600.5
7.5°	527.7	531.2	536.5	537.4	542.6	548.8	557.5	566.3	574.6	579.0	583.0
10°	489.6	495.7	503.6	501.9	509.8	519.4	528.6	542.6	549.7	557.5	564.6
12.5°	451.5	455.4	465.9	469.4	480.8	488.3	501.0	509.8	527.3	536.5	542.6
15°	384.8	401.1	414.2	430.0	444.9	458.9	470.3	486.1	501.4	508.5	518.5
17.5°	354.6	362.1	369.9	377.8	397.1	422.1	442.3	459.4	472.5	481.7	493.5
20°	323.0	330.5	339.3	346.7	358.5	376.5	401.5	430.9	446.6	456.3	467.7
22.5°	300.7	307.7	313.4	320.0	329.2	342.3	361.2	397.6	418.6	430.4	440.5
25°	276.6	285.3	291.5	296.3	303.8	318.2	333.6	354.2	391.9	401.1	415.1
27.5°	259.9	262.6	269.6	277.0	284.5	292.4	308.1	325.7	351.1	371.3	388.4
30°	240.2	246.8	253.3	256.4	263.0	274.4	284.0	302.9	322.6	338.4	359.0
32.5°	225.3	229.2	233.6	241.1	247.2	255.1	264.7	280.5	297.2	307.3	323.0
35°	208.6	211.3	220.5	223.5	229.7	237.6	247.2	259.5	277.5	285.3	296.7
37.5°	192.9	199.0	201.6	208.6	214.3	222.2	229.2	243.3	255.1	264.3	274.8
40°	180.6	183.2	188.0	194.2	199.0	205.1	213.9	224.0	236.7	244.1	253.3
42.5°	165.7	167.9	174.0	177.5	185.4	191.1	196.4	208.6	220.0	225.7	234.9
45°	149.5	154.7	158.7	165.7	170.1	177.1	183.7	192.4	202.9	209.5	214.8
47.5°	135.4	140.7	144.6	151.2	158.2	161.3	168.3	177.5	187.2	192.4	199.9
50°	124.0	125.8	133.2	136.3	143.8	149.9	154.7	162.6	173.1	176.2	182.3
52.5°	113.1	114.4	119.2	123.2	129.7	135.0	141.1	148.6	157.4	162.2	167.0
55°	103.4	104.3	106.5	110.9	115.3	121.9	127.6	134.6	142.0	147.3	151.7
57.5°	92.5	94.2	96.0	98.6	103.0	109.1	115.3	121.9	128.0	131.5	137.2
60°	79.8	82.4	85.5	88.5	91.6	96.0	103.0	109.1	114.8	117.9	122.3
62.5°	66.2	71.4	74.1	77.6	80.2	84.2	89.4	96.4	100.4	104.3	107.8
65°	59.6	60.0	60.5	64.0	68.8	72.8	77.6	82.8	89.0	91.6	94.2
67.5°	53.0	53.5	54.4	54.8	56.5	60.9	66.2	71.9	76.7	78.5	81.1
70°	46.5	46.5	48.2	48.7	49.1	49.5	53.9	59.6	64.0	66.2	69.3
72.5°	39.4	39.9	40.8	41.2	42.1	43.0	44.3	47.3	52.6	54.8	58.3
75°	32.4	32.9	33.3	33.8	35.1	35.5	36.8	38.6	40.8	43.4	45.6
77.5°	25.9	25.9	26.3	27.2	28.1	28.5	29.8	30.7	31.6	32.9	34.6
80°	19.3	19.7	19.7	20.6	20.6	21.0	21.5	22.8	23.7	24.5	25.4
82.5°	13.1	14.0	14.0	14.0	14.5	14.9	15.3	15.3	16.2	16.7	18.0
85°	7.9	8.3	8.3	8.3	7.9	8.8	8.8	9.2	9.2	9.2	9.6
87.5°	3.1	2.6	3.1	3.1	3.1	3.5	3.1	3.1	3.5	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P997704

CATALOG NUMBER: SA2XXRDP-B290DB27-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	630.7	630.7	630.7	630.7
2.5°	619.3	618.0	625.9	634.7
5°	606.6	608.8	618.9	631.2
7.5°	593.5	598.3	610.1	626.4
10°	575.1	583.8	601.8	618.5
12.5°	557.1	568.9	586.0	605.8
15°	536.9	550.1	571.1	594.8
17.5°	514.6	529.5	554.0	579.9
20°	490.9	510.6	536.5	564.6
22.5°	464.6	488.3	515.0	546.1
25°	439.2	465.1	491.8	527.7
27.5°	414.2	439.6	469.4	505.8
30°	389.2	412.5	444.5	483.5
32.5°	362.5	386.6	420.3	460.2
35°	337.9	362.1	393.6	433.1
37.5°	311.6	337.5	367.8	408.5
40°	281.0	311.2	340.6	379.6
42.5°	255.5	287.5	316.0	352.8
45°	235.4	265.6	289.3	325.2
47.5°	216.5	241.1	265.2	298.5
50°	198.6	217.4	242.4	272.2
52.5°	180.1	196.4	217.8	245.9
55°	163.5	178.8	198.1	219.6
57.5°	148.2	159.1	178.4	197.7
60°	131.1	142.5	157.4	173.6
62.5°	116.6	125.4	139.4	153.0
65°	101.3	109.6	120.1	132.8
67.5°	87.2	94.7	103.0	113.1
70°	74.5	80.2	86.3	95.1
72.5°	60.9	67.1	72.8	79.8
75°	50.0	52.6	57.4	62.2
77.5°	38.6	42.1	44.7	48.7
80°	27.6	30.7	31.6	34.6
82.5°	18.4	20.2	21.9	22.8
85°	10.5	11.4	13.1	13.6
87.5°	3.9	4.4	5.3	6.1
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P997704

CATALOG NUMBER: SA2XXRDP-B290DB27-4F0-XX-W2A-A

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference 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	19.03	20.48	19.40	20.80	21.11	13.44	14.90	13.81	15.21	15.52
	3H	20.36	21.66	20.74	21.99	22.35	14.57	15.87	14.95	16.20	16.56
	4H	20.79	22.00	21.19	22.35	22.73	15.03	16.25	15.43	16.60	16.98
	6H	21.06	22.18	21.47	22.55	22.94	15.41	16.53	15.82	16.90	17.29
	8H	21.13	22.20	21.56	22.59	22.99	15.53	16.60	15.96	16.99	17.39
	12H	21.17	22.19	21.60	22.57	23.00	15.62	16.64	16.05	17.02	17.45
4H	2H	19.01	20.22	19.41	20.57	20.95	14.13	15.34	14.53	15.69	16.07
	3H	20.45	21.46	20.86	21.86	22.26	15.42	16.42	15.83	16.83	17.23
	4H	20.96	21.86	21.39	22.28	22.72	15.98	16.88	16.41	17.30	17.74
	6H	21.33	22.12	21.79	22.56	23.02	16.46	17.24	16.92	17.69	18.15
	8H	21.44	22.18	21.91	22.62	23.09	16.62	17.35	17.09	17.80	18.27
	12H	21.52	22.17	22.00	22.65	23.12	16.74	17.40	17.23	17.88	18.35
8H	4H	20.94	21.68	21.41	22.12	22.59	16.30	17.03	16.76	17.47	17.94
	6H	21.36	21.97	21.86	22.46	22.94	16.88	17.48	17.38	17.98	18.45
	8H	21.51	22.05	22.02	22.56	23.05	17.11	17.65	17.63	18.16	18.65
	12H	21.62	22.10	22.13	22.59	23.16	17.30	17.78	17.81	18.27	18.84
12H	4H	20.92	21.57	21.41	22.05	22.53	16.33	16.98	16.81	17.46	17.93
	6H	21.34	21.88	21.85	22.39	22.88	16.94	17.48	17.46	17.99	18.48
	8H	21.52	21.99	22.03	22.49	23.05	17.22	17.70	17.74	18.19	18.76