

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: P997585

Luminaire Tested: SA2XXDP-B290DB35-4F0-XX-W2A-A

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997585
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDP-B290DB35-4F0-XX-W2A-A
Description: Define 2 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

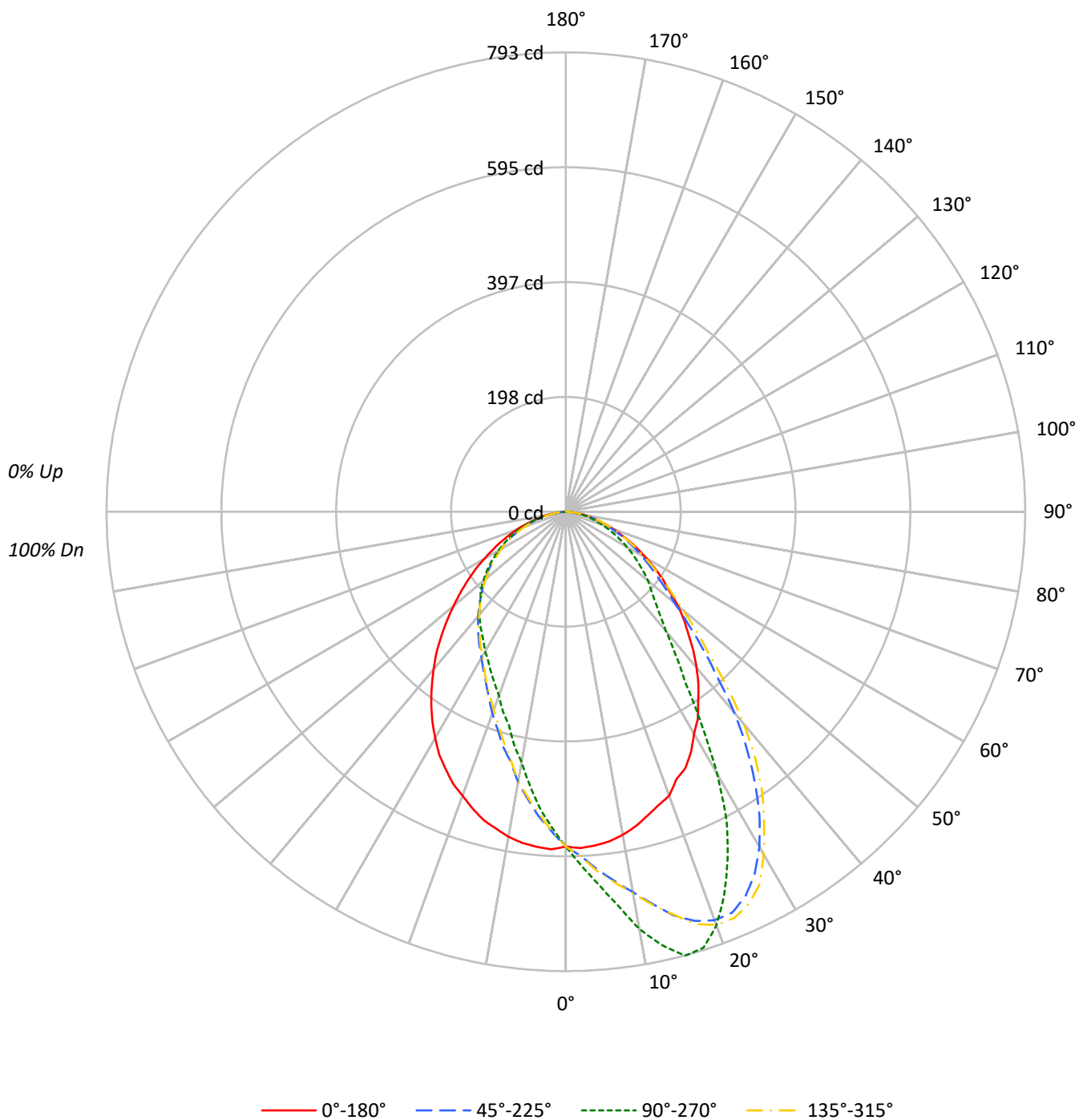
Lumens per Lamp: N/A
Luminaire Lumens: 1275.0 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.09 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P997585

CATALOG NUMBER: SA2XXDP-B290DB35-4F0-XX-W2A-A

Luminous Intensity Polar Plot



TEST NUMBER: P997585

CATALOG NUMBER: SA2XXDP-B290DB35-4F0-XX-W2A-A

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92
2	101	94	87	82	98	92	86	81	88	83	79		85	81	78		82
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		74
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60
6	74	61	53	47	72	60	52	46	58	51	46		57	51	46		55
7	69	56	48	42	67	55	47	42	54	46	41		52	46	41		51
8	64	51	43	38	63	51	43	38	49	42	37		48	42	37		47
9	60	47	39	34	59	47	39	34	46	39	34		45	38	34		44
10	56	44	36	31	55	43	36	31	42	36	31		41	35	31		41

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9148	9148	9148	9148
5°	9189	10255	9226	8159
10°	9102	11751	9160	7061
15°	8902	13000	9026	6239
20°	8785	12802	8785	5687
25°	8527	11545	8565	5338
30°	8086	9539	8242	5083
35°	7699	6953	7828	4901
40°	7251	5552	7334	4800
45°	6691	4853	6801	4663
50°	6213	4561	6223	4573
55°	5663	4206	5699	4449
60°	5078	3853	5148	4261
65°	4558	3510	4641	4075
70°	4050	3184	4151	3804
75°	3480	2826	3615	3370
80°	2835	2434	3036	2716
85°	2089	2179	2252	1616

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 155°

Vertical Angle: 45°

Luminance: 11943 cd/sqm

TEST NUMBER: P997585

CATALOG NUMBER: SA2XXDP-B290DB35-4F0-XX-W2A-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.0	4.3
10°-20°	160.2	12.6
20°-30°	232.5	18.2
30°-40°	245.1	19.2
40°-50°	216.9	17.0
50°-60°	173.2	13.6
60°-70°	117.6	9.2
70°-80°	60.2	4.7
80°-90°	14.2	1.1
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°	447.8	35.1
0°-40°	692.9	54.3
0°-60°	1083.0	84.9
0°-90°	1275.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1275.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	578	578	578	578	578	
5°	578	645	581	514	578	55
15°	543	793	551	381	543	153
25°	488	661	490	306	488	223
35°	398	360	405	254	398	249
45°	299	217	304	208	299	232
55°	205	152	206	161	205	183
65°	122	94	124	109	122	121
75°	57	46	59	55	57	61
85°	12	12	12	9	12	14
90°	0	0	0	0	0	

TEST NUMBER: P997585

CATALOG NUMBER: SA2XXDP-B290DB35-4F0-XX-W2A-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9
2.5°	581.0	582.3	584.6	585.0	589.4	593.0	597.0	597.0	598.3	597.9	594.3
5°	578.3	582.3	588.1	593.0	601.0	604.5	609.9	613.9	617.4	620.1	619.6
7.5°	573.9	581.0	589.4	598.8	609.4	615.6	623.2	630.3	635.2	639.6	642.7
10°	566.3	578.3	589.9	602.3	616.1	624.5	633.4	642.7	650.3	658.7	666.7
12.5°	556.1	573.4	587.7	604.1	621.0	630.3	644.5	651.6	666.3	687.6	693.4
15°	543.2	566.8	580.1	601.0	623.2	630.7	650.3	661.8	692.0	705.4	721.4
17.5°	531.2	557.5	575.2	599.2	621.0	635.6	654.7	678.3	703.6	722.7	740.5
20°	521.5	546.8	568.1	594.8	622.3	641.0	661.0	689.4	716.9	736.5	750.2
22.5°	499.3	531.7	556.6	586.3	619.6	645.4	664.5	695.6	725.4	737.4	749.3
25°	488.2	516.1	545.0	578.8	617.9	648.5	665.0	699.6	725.8	730.2	732.9
27.5°	467.7	499.3	533.0	571.7	617.4	643.2	664.1	695.6	716.5	713.4	705.4
30°	442.4	481.1	518.4	560.1	611.2	639.2	658.7	687.6	698.3	682.3	668.1
32.5°	423.8	460.2	501.5	549.9	604.1	630.7	649.8	672.5	674.7	645.9	621.9
35°	398.4	438.9	485.5	536.6	592.1	616.1	633.9	647.6	637.0	596.5	568.1
37.5°	375.8	415.8	465.5	517.5	575.7	599.2	613.4	615.6	589.4	553.9	512.1
40°	350.9	392.2	444.2	498.8	557.5	577.9	586.8	580.1	542.4	501.0	452.6
42.5°	326.0	366.9	422.9	478.8	534.4	551.7	555.2	537.0	490.8	442.4	386.4
45°	298.9	341.6	397.5	454.0	507.7	517.5	517.9	491.7	437.1	386.4	334.5
47.5°	276.7	316.3	371.8	428.2	473.5	480.2	477.5	447.3	387.8	330.9	285.6
50°	252.3	290.1	345.1	400.7	439.3	441.1	434.4	391.3	333.1	281.2	245.2
52.5°	226.1	264.3	314.9	368.2	402.9	400.2	387.3	341.1	286.5	243.4	215.9
55°	205.2	239.0	286.5	338.5	362.9	355.4	341.1	294.1	251.0	214.5	190.6
57.5°	182.1	211.9	258.5	303.8	318.0	310.9	296.7	252.7	212.8	185.2	169.2
60°	160.4	187.4	228.3	266.1	277.2	269.6	253.2	213.7	184.8	161.7	149.7
62.5°	140.4	163.9	198.1	232.8	237.2	229.6	215.4	183.4	158.6	140.4	131.5
65°	121.7	143.9	171.5	197.7	201.7	193.7	179.0	155.9	135.0	123.5	115.0
67.5°	103.5	121.3	145.7	164.8	167.0	159.5	147.5	128.8	115.9	103.5	97.3
70°	87.5	100.8	119.9	135.5	136.4	129.3	123.0	106.2	96.4	87.5	82.6
72.5°	72.0	81.3	95.9	107.5	107.9	103.5	97.7	87.1	78.6	72.4	67.5
75°	56.9	64.9	73.7	84.0	83.5	80.0	75.5	68.8	61.7	57.7	55.5
77.5°	43.5	48.4	55.5	62.2	62.2	60.4	57.7	52.9	48.4	44.4	42.2
80°	31.1	34.2	40.0	42.2	43.1	42.6	40.4	36.9	35.1	32.0	31.1
82.5°	20.0	22.2	24.9	27.1	28.4	27.5	27.1	25.3	22.7	21.8	20.9
85°	11.5	12.4	13.8	15.1	15.5	15.1	16.0	14.7	13.3	13.3	12.9
87.5°	4.9	5.3	6.2	6.2	6.7	6.7	6.2	6.7	6.7	6.2	5.8
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: P997585

CATALOG NUMBER: SA2XXDP-B290DB35-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9
2.5°	600.5	601.0	601.9	606.3	608.5	609.0	607.2	611.2	612.5	611.2	610.3
5°	629.0	631.6	637.0	642.7	642.3	642.7	645.4	648.1	649.0	645.4	646.7
7.5°	653.8	659.2	665.0	673.8	673.8	678.3	680.1	682.3	687.6	684.9	684.1
10°	682.3	689.4	700.0	714.3	714.7	719.1	723.6	730.7	732.9	731.1	732.0
12.5°	717.8	731.6	732.5	748.0	755.1	756.0	763.1	761.8	766.2	766.2	773.8
15°	733.4	754.7	766.7	781.8	786.2	780.9	786.7	792.9	793.3	793.3	792.9
17.5°	761.3	769.8	781.8	789.8	791.5	791.5	792.0	794.7	792.9	789.3	792.0
20°	767.1	770.7	775.1	774.2	775.1	770.7	766.2	761.8	762.2	760.0	766.7
22.5°	756.5	755.6	745.3	738.7	738.7	729.8	721.4	717.4	713.4	714.7	716.9
25°	729.8	716.0	703.6	693.8	691.6	677.4	665.8	662.3	655.6	661.0	661.8
27.5°	687.2	671.6	651.6	643.2	631.6	625.9	617.9	607.2	593.4	601.4	600.1
30°	641.4	618.3	601.9	581.4	563.2	561.9	546.8	529.0	521.9	521.9	525.9
32.5°	590.3	559.7	535.7	506.8	489.1	481.5	463.3	445.5	449.5	436.2	441.1
35°	530.8	490.4	460.2	432.2	418.9	410.0	386.4	376.7	366.0	359.8	371.3
37.5°	473.9	427.3	388.7	358.0	353.1	337.1	321.1	314.9	308.7	311.4	310.9
40°	404.7	363.3	328.7	304.7	296.3	288.7	278.1	270.5	266.5	268.7	269.2
42.5°	342.0	307.4	281.6	264.7	257.6	252.3	247.0	240.8	239.4	239.4	241.2
45°	293.6	265.2	247.9	234.1	230.1	226.1	222.1	219.4	218.5	216.8	218.1
47.5°	255.0	232.3	221.7	211.4	207.0	206.1	202.6	201.2	199.4	199.0	199.4
50°	222.5	208.3	198.6	192.8	189.7	188.3	186.6	183.9	183.0	185.2	184.3
52.5°	199.9	186.6	181.2	175.5	173.7	171.9	169.2	169.7	169.2	168.3	168.3
55°	177.2	168.8	163.5	159.0	158.6	156.8	154.6	153.7	153.2	152.4	153.7
57.5°	159.0	152.4	147.5	143.5	141.7	141.7	139.5	137.7	137.7	137.3	137.7
60°	140.8	134.1	131.0	127.0	125.7	125.3	123.9	123.0	121.7	121.7	121.7
62.5°	123.9	118.6	115.0	111.5	111.9	109.7	107.9	107.0	107.0	107.5	107.5
65°	107.9	104.4	99.9	96.8	95.9	95.5	94.6	94.2	92.8	93.7	93.7
67.5°	93.3	88.4	85.7	84.4	83.1	82.6	81.7	80.8	80.4	80.0	80.8
70°	78.6	74.6	72.4	71.5	70.2	69.7	69.3	68.0	68.4	68.8	69.3
72.5°	65.3	61.7	61.3	58.6	58.6	58.6	56.9	57.7	57.3	56.4	57.3
75°	51.5	49.7	48.9	47.5	48.0	47.5	47.1	45.8	45.8	46.2	46.6
77.5°	40.9	39.1	38.6	37.3	36.4	37.3	36.4	36.0	36.0	36.4	36.4
80°	30.2	29.3	28.0	28.0	28.0	27.5	27.5	27.5	27.1	26.7	27.1
82.5°	20.0	20.0	19.5	19.1	19.5	18.7	19.1	19.1	19.1	19.1	19.1
85°	12.9	12.4	12.4	12.0	12.0	12.0	12.4	11.5	11.5	12.0	12.0
87.5°	5.8	5.8	5.8	6.2	5.8	5.8	5.8	6.2	5.8	5.8	5.8
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: P997585

CATALOG NUMBER: SA2XXDP-B290DB35-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9
2.5°	612.5	609.4	606.8	607.2	609.4	607.7	603.2	597.4	595.2	592.5	595.2
5°	649.4	646.7	641.4	641.9	640.5	638.7	631.6	622.8	622.8	615.6	614.8
7.5°	685.8	681.8	678.3	677.4	672.5	668.9	662.7	650.3	645.4	637.0	632.1
10°	726.7	723.6	719.6	714.7	712.0	705.8	695.6	677.4	668.5	657.0	648.5
12.5°	768.0	767.6	758.7	748.9	748.5	738.7	731.6	707.1	695.2	679.6	659.6
15°	794.2	792.0	787.1	782.2	783.5	772.9	756.9	728.0	720.0	701.4	680.1
17.5°	793.8	793.8	792.4	791.5	790.2	787.1	778.2	759.1	746.2	722.7	702.7
20°	768.4	774.2	775.6	775.1	779.6	781.8	781.3	769.3	759.1	738.2	717.8
22.5°	717.8	731.1	736.9	740.5	749.8	754.7	766.2	761.8	759.1	743.6	726.2
25°	670.7	675.2	692.5	693.4	706.3	718.3	729.8	737.4	747.1	741.4	726.7
27.5°	609.9	620.1	632.5	641.9	644.5	668.9	688.0	702.3	724.5	726.2	721.4
30°	541.0	545.9	566.3	578.8	593.0	610.8	638.3	662.7	682.7	700.9	707.1
32.5°	457.1	477.1	489.1	504.2	516.6	548.1	581.9	613.4	636.5	667.2	680.5
35°	380.2	395.8	416.2	422.4	445.1	471.7	515.7	556.1	591.2	622.3	649.4
37.5°	316.7	329.1	350.9	360.7	374.0	408.2	445.1	495.3	537.5	575.7	609.4
40°	273.2	282.5	298.9	302.0	313.2	344.2	374.0	421.1	477.1	528.6	565.5
42.5°	243.4	247.9	259.0	263.0	270.1	290.9	317.6	362.0	414.0	467.3	519.3
45°	222.1	225.2	231.9	235.4	244.3	253.6	275.4	310.9	351.8	405.5	461.5
47.5°	203.0	207.0	209.7	211.9	216.8	227.0	241.2	267.4	306.5	355.8	410.0
50°	187.0	188.3	193.2	193.7	196.8	203.4	216.8	232.8	263.8	303.8	356.2
52.5°	171.0	172.3	175.5	178.6	179.9	185.2	194.1	207.4	230.5	262.1	308.7
55°	155.0	156.8	159.9	162.1	163.5	167.9	173.2	186.1	204.3	226.5	264.7
57.5°	139.0	143.0	143.9	145.2	147.5	152.4	157.2	164.8	179.0	199.4	227.4
60°	123.9	125.3	128.4	129.7	131.9	134.6	140.8	146.6	156.8	172.8	198.1
62.5°	108.4	111.5	112.8	114.2	115.9	119.0	123.0	129.3	138.1	151.0	171.0
65°	95.1	95.5	98.2	99.9	101.7	103.9	107.9	113.7	119.0	131.0	145.7
67.5°	82.2	83.1	84.0	85.7	87.9	90.2	93.7	96.8	103.5	111.5	123.0
70°	69.7	69.7	72.0	73.3	72.8	75.5	78.2	81.7	86.6	94.2	103.5
72.5°	58.6	58.2	60.0	60.4	61.3	63.1	64.9	68.4	71.1	76.8	84.0
75°	46.6	47.5	48.4	48.4	49.7	51.1	52.9	54.6	57.7	61.3	66.6
77.5°	36.9	36.9	37.8	38.2	39.5	39.1	40.9	42.6	44.9	48.0	52.0
80°	27.1	28.0	28.0	28.0	28.4	28.9	30.6	32.0	33.3	35.5	37.3
82.5°	19.1	19.1	20.0	20.0	20.0	20.9	20.9	21.3	22.2	23.5	24.9
85°	12.0	12.0	12.0	12.4	12.0	12.4	13.3	12.9	13.3	14.2	14.2
87.5°	5.8	5.8	5.8	5.8	5.8	6.2	5.8	6.2	6.7	6.7	6.7
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: P997585

CATALOG NUMBER: SA2XXDP-B290DB35-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9
2.5°	593.0	590.8	589.4	590.3	587.7	581.0	581.0	583.2	580.6	577.9	573.9
5°	609.4	605.0	602.3	601.9	595.7	585.0	582.8	580.6	574.8	568.6	561.9
7.5°	625.4	617.4	613.0	609.9	601.0	587.2	581.4	576.6	567.2	557.9	549.5
10°	638.7	627.2	621.9	617.0	605.4	588.1	578.8	569.9	557.9	545.9	535.2
12.5°	649.4	636.1	629.4	622.3	608.1	585.4	573.9	559.7	547.7	531.7	521.0
15°	667.2	639.6	633.4	626.8	612.1	581.0	566.8	550.8	534.4	513.0	501.5
17.5°	681.4	644.5	644.1	629.9	610.8	579.2	557.5	536.6	518.8	497.5	479.3
20°	689.8	652.1	645.0	630.3	606.3	567.2	544.6	521.5	502.4	476.6	458.4
22.5°	696.9	662.7	644.1	626.3	597.0	563.2	529.9	508.2	481.9	454.0	436.6
25°	699.6	665.0	645.4	625.0	590.3	551.7	513.9	490.4	461.1	435.7	412.2
27.5°	700.0	664.5	640.5	619.2	581.0	536.6	497.9	473.1	440.6	411.3	387.8
30°	695.6	659.6	637.9	614.8	572.1	522.8	478.4	450.9	416.2	386.9	362.5
32.5°	682.3	649.8	632.1	606.8	560.6	503.7	459.7	429.1	392.7	363.8	340.2
35°	660.1	637.9	618.3	594.8	545.5	485.9	441.1	405.1	368.2	340.7	318.5
37.5°	632.5	620.5	602.3	579.2	528.1	470.0	420.2	380.2	343.4	316.7	294.9
40°	595.2	598.3	580.6	559.7	507.7	448.2	393.1	354.9	320.3	295.4	274.1
42.5°	554.8	567.7	557.5	537.5	485.1	424.2	373.1	330.9	297.2	271.4	253.6
45°	511.3	533.5	527.3	512.6	461.5	398.9	344.7	303.8	274.1	249.2	233.6
47.5°	463.7	495.3	495.3	484.6	435.3	373.6	320.3	278.5	249.2	231.4	216.3
50°	415.3	450.9	456.6	449.5	406.0	344.7	290.5	252.7	227.4	210.1	199.0
52.5°	364.7	406.0	416.6	413.1	374.9	317.2	266.1	229.2	206.1	191.0	181.2
55°	316.3	364.2	375.8	377.1	341.6	286.9	239.0	206.5	184.3	174.1	165.7
57.5°	270.5	316.7	329.6	331.8	307.8	259.4	213.7	185.2	165.2	156.8	150.1
60°	231.4	270.1	286.9	291.8	271.0	227.4	190.1	162.6	147.5	139.5	133.3
62.5°	199.4	230.5	248.3	249.6	240.3	199.4	165.7	142.6	129.7	122.6	119.5
65°	168.3	196.3	207.0	212.3	204.8	172.8	143.0	123.9	113.7	107.5	104.4
67.5°	143.5	161.2	170.1	177.2	169.7	145.7	121.7	106.2	98.6	92.4	90.6
70°	117.7	132.4	139.0	146.1	139.5	121.3	103.9	89.7	83.1	78.2	76.0
72.5°	94.2	105.7	111.9	116.4	112.4	97.3	83.1	73.3	68.4	64.9	63.5
75°	74.6	82.6	86.2	89.3	87.5	76.0	67.1	59.1	54.6	51.5	50.6
77.5°	56.9	62.6	66.6	67.5	65.3	57.7	50.2	45.3	41.8	40.0	39.1
80°	40.4	44.0	46.2	47.5	45.3	42.2	36.9	33.3	30.2	28.0	27.5
82.5°	27.1	28.9	30.6	30.2	29.3	26.7	23.5	21.8	20.4	18.7	18.7
85°	15.5	16.0	16.9	17.3	16.9	15.1	13.3	12.4	11.5	10.2	10.2
87.5°	6.7	7.1	7.1	7.6	6.7	6.7	5.8	4.9	4.9	4.4	4.0
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: P997585

CATALOG NUMBER: SA2XXDP-B290DB35-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9
2.5°	571.7	573.9	573.4	569.0	564.1	560.1	552.6	553.5	550.8	551.2	553.9
5°	557.5	557.5	555.7	549.5	541.5	537.0	528.6	526.4	521.0	520.6	520.1
7.5°	542.4	540.1	537.9	529.0	519.3	512.1	500.6	497.9	492.6	489.1	487.3
10°	524.6	521.5	517.0	506.8	494.8	485.9	473.9	470.4	460.2	455.7	453.1
12.5°	505.0	503.3	496.2	487.7	468.2	458.4	441.1	444.6	434.4	425.5	424.2
15°	485.5	478.8	474.8	461.1	437.5	433.1	419.3	412.2	402.9	395.8	395.8
17.5°	466.4	456.2	447.3	432.6	415.3	402.9	392.7	389.1	377.6	370.5	369.1
20°	441.1	429.5	427.3	406.4	394.4	380.7	370.9	362.0	353.6	350.5	348.2
22.5°	417.1	403.8	400.2	382.4	370.5	356.7	346.9	340.7	334.5	332.3	328.3
25°	391.3	383.3	378.0	358.9	345.6	332.7	326.0	321.6	315.8	315.4	312.7
27.5°	366.5	358.9	353.6	335.4	325.6	313.6	308.3	303.4	300.3	298.9	297.6
30°	345.1	336.7	330.5	317.2	305.2	295.4	290.9	287.8	286.1	283.8	283.4
32.5°	321.6	316.7	308.3	298.1	288.7	279.4	276.7	274.5	271.8	271.0	270.5
35°	301.6	294.9	289.6	278.1	274.1	266.1	263.0	261.2	257.6	256.7	255.9
37.5°	282.1	275.8	270.1	263.0	255.4	251.0	249.2	246.5	244.7	245.2	244.3
40°	262.5	257.6	253.2	245.6	241.2	239.0	235.4	232.8	231.9	232.3	231.9
42.5°	243.4	239.0	236.3	230.5	226.1	223.9	221.7	219.0	220.3	220.3	221.7
45°	226.1	222.1	220.3	215.9	213.2	209.7	207.4	207.0	208.8	208.3	208.3
47.5°	208.3	207.0	204.8	200.8	197.2	195.0	194.6	194.6	196.3	197.2	196.8
50°	194.6	191.9	189.2	186.1	183.4	182.6	181.2	182.1	183.9	183.9	184.8
52.5°	177.2	175.5	174.6	171.9	170.1	170.1	170.1	170.6	171.9	173.2	172.8
55°	162.1	160.8	159.9	158.6	156.4	156.8	156.4	157.2	158.6	159.9	160.8
57.5°	146.1	145.7	144.8	142.6	142.6	142.1	143.5	143.9	146.1	147.0	148.4
60°	131.9	130.6	130.6	128.8	128.8	128.8	130.1	131.5	133.3	133.7	134.6
62.5°	116.8	116.8	116.4	115.0	115.0	116.4	116.8	118.6	119.5	119.5	120.8
65°	102.6	102.2	101.7	102.2	102.6	102.6	103.9	104.8	105.7	106.2	106.6
67.5°	88.4	87.9	88.8	88.4	89.3	91.1	90.6	91.9	93.3	93.3	93.7
70°	75.1	76.0	75.5	76.4	76.0	76.8	78.2	78.6	78.6	79.1	80.4
72.5°	62.6	62.6	62.6	62.2	62.6	63.5	64.4	64.9	65.7	66.2	67.5
75°	50.6	50.6	49.7	50.6	50.6	51.5	52.4	52.4	52.4	53.3	54.6
77.5°	38.2	38.6	38.2	39.1	39.1	39.5	40.4	40.0	40.9	41.3	41.8
80°	28.0	27.5	27.5	27.5	28.0	28.0	28.9	29.3	29.3	30.6	29.8
82.5°	17.8	18.2	17.8	18.2	18.2	18.7	18.2	18.7	19.1	20.0	19.5
85°	10.2	9.8	9.8	10.2	9.8	9.8	10.2	9.8	10.2	9.8	10.2
87.5°	4.0	3.6	3.6	3.6	3.6	3.1	3.1	2.7	2.7	2.7	2.2
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: P997585

CATALOG NUMBER: SA2XXDP-B290DB35-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9
2.5°	550.8	552.1	549.0	548.1	549.0	545.9	546.8	547.7	547.7	549.0	549.9
5°	518.8	517.0	513.9	513.0	512.1	513.5	512.6	513.9	514.4	517.5	517.9
7.5°	487.3	484.6	481.9	479.3	478.4	476.2	478.4	478.4	481.5	480.6	482.8
10°	450.0	449.5	446.0	444.6	442.9	439.3	444.2	442.9	445.1	449.1	450.0
12.5°	422.4	417.5	419.8	413.5	415.8	412.2	412.7	412.7	416.2	416.6	415.8
15°	396.2	392.2	386.4	383.8	382.4	380.7	386.4	386.9	384.2	390.4	388.2
17.5°	369.6	369.6	364.2	362.9	359.3	361.1	360.2	360.7	359.8	364.2	366.5
20°	346.5	344.2	342.5	342.9	338.5	337.6	336.7	337.6	340.7	343.8	344.7
22.5°	327.8	326.5	322.0	322.9	319.4	320.7	319.8	322.0	322.5	322.5	325.6
25°	310.0	308.3	308.7	306.9	305.6	305.6	304.3	305.6	307.4	308.3	308.7
27.5°	296.7	295.4	293.2	291.8	292.7	290.5	292.3	293.6	293.6	292.7	293.6
30°	280.7	281.6	281.6	277.2	279.0	278.1	279.4	280.3	280.3	280.7	279.8
32.5°	270.1	267.4	267.0	266.5	266.5	264.7	264.7	266.1	266.5	267.0	268.3
35°	255.9	255.9	253.6	255.0	253.2	253.6	253.2	253.6	254.5	253.2	254.5
37.5°	243.0	243.4	242.5	243.4	243.9	243.0	242.1	243.9	243.0	243.0	242.1
40°	231.9	231.4	231.9	231.9	231.9	232.3	231.4	231.4	231.4	230.5	229.6
42.5°	222.5	219.9	220.8	221.2	219.9	219.9	220.3	219.9	221.2	218.5	218.5
45°	209.2	208.3	208.8	208.8	209.7	208.3	209.2	209.7	208.3	207.9	207.0
47.5°	197.2	198.1	197.2	198.1	198.1	199.0	197.2	197.7	198.1	196.3	195.0
50°	185.2	185.2	186.6	186.1	186.6	185.7	185.7	185.2	185.7	184.8	183.4
52.5°	174.1	172.8	175.0	174.6	174.1	173.7	173.2	173.7	172.8	171.9	171.9
55°	160.4	160.4	161.7	162.1	162.1	161.2	160.4	160.8	160.4	159.9	159.5
57.5°	149.2	147.5	148.4	148.8	148.8	147.5	148.4	147.5	147.5	147.9	146.6
60°	135.0	135.0	134.1	135.5	135.5	134.6	134.6	135.0	134.1	133.7	133.3
62.5°	119.9	120.4	121.7	122.2	122.6	121.7	120.8	121.3	121.3	119.9	120.4
65°	107.0	107.9	109.7	109.3	108.4	108.8	107.9	108.4	107.0	107.5	106.2
67.5°	94.6	94.2	94.6	94.6	95.5	95.1	94.2	94.2	93.7	95.1	93.7
70°	81.3	81.3	81.3	81.3	81.7	82.2	81.3	80.4	80.8	80.0	79.5
72.5°	67.5	68.0	67.5	68.4	67.1	68.0	68.0	67.5	67.1	67.1	67.1
75°	54.6	55.5	54.2	54.6	54.2	55.1	54.6	54.6	53.7	53.3	53.7
77.5°	41.8	42.2	41.3	41.8	41.3	41.8	41.8	41.3	41.3	41.3	41.3
80°	29.8	30.2	29.8	29.3	28.9	29.8	28.9	29.3	29.8	29.3	30.2
82.5°	19.1	19.1	18.7	19.1	18.2	18.2	18.7	18.7	18.2	19.1	18.2
85°	9.3	9.3	10.2	9.3	8.9	8.9	8.9	9.3	8.9	9.8	9.3
87.5°	2.2	1.8	2.2	2.2	1.8	1.8	2.2	1.8	2.2	2.7	1.8
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: P997585

CATALOG NUMBER: SA2XXDP-B290DB35-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9
2.5°	548.6	552.1	550.8	545.9	551.7	551.7	555.7	555.7	560.6	562.3	565.0
5°	517.5	520.1	522.4	520.1	524.1	530.4	533.9	537.0	543.7	546.4	550.3
7.5°	484.2	489.1	491.3	491.3	497.9	505.0	512.1	516.6	525.9	529.5	533.5
10°	451.7	457.5	462.0	461.5	472.6	477.1	485.9	496.2	505.5	510.8	516.6
12.5°	417.5	420.6	426.9	435.7	438.4	446.4	456.6	469.5	486.4	491.3	499.7
15°	389.1	397.5	402.4	406.4	412.7	420.2	431.3	443.7	460.6	471.3	480.2
17.5°	365.1	376.2	379.3	378.4	386.4	398.0	410.9	420.2	435.3	448.2	456.6
20°	345.6	350.0	355.4	357.6	363.8	376.2	388.7	399.3	411.8	422.0	431.8
22.5°	326.0	329.6	334.0	338.0	342.9	350.0	362.0	375.3	387.3	397.1	408.2
25°	310.0	312.3	316.3	319.4	324.7	329.6	338.0	352.7	366.9	372.7	382.4
27.5°	294.5	296.3	298.9	302.5	305.2	310.0	317.6	329.6	344.2	350.0	363.3
30°	280.7	282.1	284.7	286.5	287.8	293.6	299.4	308.7	319.8	327.8	337.6
32.5°	267.8	269.2	271.8	272.3	274.1	277.2	282.5	290.9	300.7	307.4	315.8
35°	253.6	254.5	257.2	258.1	259.4	262.1	266.1	272.3	281.2	286.1	293.6
37.5°	242.5	242.1	243.9	245.2	247.0	248.3	249.6	255.9	262.5	267.0	272.7
40°	230.5	229.6	230.1	231.9	232.8	234.5	234.5	240.8	245.2	248.7	253.2
42.5°	218.5	218.1	217.2	218.1	219.0	219.4	219.9	224.3	228.8	231.9	236.8
45°	206.5	206.1	205.2	205.7	205.7	206.5	207.9	209.7	212.8	215.4	218.1
47.5°	195.4	194.6	193.2	192.8	193.7	193.7	193.7	195.4	198.6	199.4	202.1
50°	183.9	182.6	180.8	179.9	179.9	179.5	180.3	180.8	183.4	184.3	186.6
52.5°	171.5	170.6	168.8	167.0	167.5	166.6	167.0	167.5	168.3	169.7	171.0
55°	159.0	157.2	155.9	155.5	154.1	154.1	152.8	154.6	154.1	154.6	156.4
57.5°	147.0	145.2	143.0	142.1	140.8	140.4	139.5	139.0	139.5	140.8	142.1
60°	132.8	131.9	130.6	129.3	128.4	127.0	126.1	126.1	125.7	125.7	126.1
62.5°	119.0	118.6	116.8	116.4	115.5	114.6	113.3	112.4	112.4	113.3	113.7
65°	105.7	105.3	103.9	103.5	101.3	100.4	99.9	99.5	98.6	98.6	98.6
67.5°	93.3	91.9	91.9	89.7	87.9	87.1	86.2	85.7	85.7	85.7	86.2
70°	79.5	79.5	78.2	76.8	75.1	75.5	74.2	72.8	72.8	72.0	72.4
72.5°	66.2	65.7	64.4	64.0	62.6	61.3	60.4	61.3	60.0	59.5	60.0
75°	53.3	52.9	52.0	51.1	51.5	50.2	48.9	48.4	48.4	47.5	47.5
77.5°	40.9	41.8	40.0	39.5	38.6	37.8	37.3	36.9	36.9	36.9	37.8
80°	28.4	28.9	28.9	28.0	28.4	27.1	27.1	27.1	25.8	26.2	26.7
82.5°	18.2	18.2	17.8	18.2	17.8	17.8	17.3	17.3	16.9	16.9	17.3
85°	10.2	9.8	9.3	10.2	9.8	9.8	9.3	9.3	9.3	9.3	9.3
87.5°	2.2	2.7	2.7	2.7	2.7	3.1	3.1	3.1	3.6	3.6	3.6
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: P997585

CATALOG NUMBER: SA2XXDP-B290DB35-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	577.9	577.9	577.9	577.9
2.5°	567.2	567.2	573.9	581.0
5°	554.8	557.9	568.6	578.3
7.5°	542.8	548.1	561.5	573.9
10°	528.1	535.2	551.7	566.3
12.5°	513.9	520.6	539.7	556.1
15°	493.9	502.4	522.8	543.2
17.5°	473.9	482.4	507.3	531.2
20°	450.4	461.5	489.5	521.5
22.5°	428.6	442.4	473.5	499.3
25°	404.7	426.0	454.8	488.2
27.5°	383.3	404.7	434.0	467.7
30°	359.3	381.1	411.3	442.4
32.5°	336.3	356.2	385.6	423.8
35°	312.3	331.4	359.8	398.4
37.5°	290.5	309.2	340.2	375.8
40°	269.2	288.7	315.4	350.9
42.5°	249.2	266.5	290.5	326.0
45°	231.0	243.4	265.6	298.9
47.5°	211.9	223.0	243.4	276.7
50°	194.1	203.4	221.2	252.3
52.5°	176.8	184.8	201.2	226.1
55°	161.2	168.8	180.8	205.2
57.5°	145.2	151.0	162.6	182.1
60°	129.7	135.0	144.4	160.4
62.5°	114.2	118.6	127.5	140.4
65°	100.4	103.9	110.6	121.7
67.5°	87.1	89.3	94.6	103.5
70°	74.2	76.0	80.4	87.5
72.5°	60.4	62.2	67.1	72.0
75°	48.9	49.3	52.9	56.9
77.5°	38.2	37.8	40.4	43.5
80°	26.2	27.5	29.8	31.1
82.5°	17.8	18.2	19.1	20.0
85°	9.8	10.2	10.2	11.5
87.5°	4.0	4.4	4.4	4.9
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P997585

CATALOG NUMBER: SA2XXDP-B290DB35-4F0-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	19.66	21.18	20.03	21.49	21.81	15.93	17.45	16.29	17.76	18.07
	3H	20.78	22.14	21.15	22.46	22.83	17.34	18.70	17.72	19.03	19.39
	4H	21.10	22.38	21.50	22.73	23.10	17.85	19.13	18.25	19.47	19.85
	6H	21.29	22.47	21.70	22.84	23.23	18.21	19.39	18.62	19.75	20.14
	8H	21.33	22.45	21.76	22.84	23.24	18.32	19.44	18.75	19.83	20.23
	12H	21.34	22.42	21.77	22.80	23.23	18.39	19.47	18.82	19.85	20.28
4H	2H	19.78	21.06	20.18	21.41	21.78	16.73	18.00	17.13	18.35	18.73
	3H	21.11	22.17	21.52	22.57	22.97	18.30	19.36	18.71	19.76	20.16
	4H	21.59	22.54	22.02	22.96	23.39	18.90	19.86	19.33	20.27	20.71
	6H	21.92	22.75	22.37	23.19	23.65	19.36	20.18	19.81	20.63	21.09
	8H	21.99	22.77	22.46	23.21	23.68	19.50	20.27	19.96	20.72	21.19
	12H	22.03	22.73	22.52	23.20	23.67	19.60	20.30	20.09	20.77	21.25
8H	4H	21.67	22.44	22.13	22.89	23.36	19.31	20.08	19.77	20.53	21.00
	6H	22.08	22.72	22.57	23.21	23.69	19.85	20.49	20.35	20.98	21.46
	8H	22.21	22.78	22.72	23.29	23.78	20.05	20.62	20.56	21.13	21.62
	12H	22.30	22.80	22.81	23.29	23.86	20.22	20.72	20.73	21.21	21.78
12H	4H	21.66	22.35	22.14	22.83	23.30	19.36	20.06	19.85	20.54	21.01
	6H	22.07	22.65	22.58	23.16	23.64	19.93	20.50	20.44	21.01	21.50
	8H	22.24	22.74	22.75	23.24	23.80	20.18	20.68	20.69	21.18	21.74