

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: P997720

Luminaire Tested: SA2XXRDP-B290DB40-4F0-XX-W2A-A

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997720
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-B290DB40-4F0-XX-W2A-A
Description: Define 2 Regressed Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

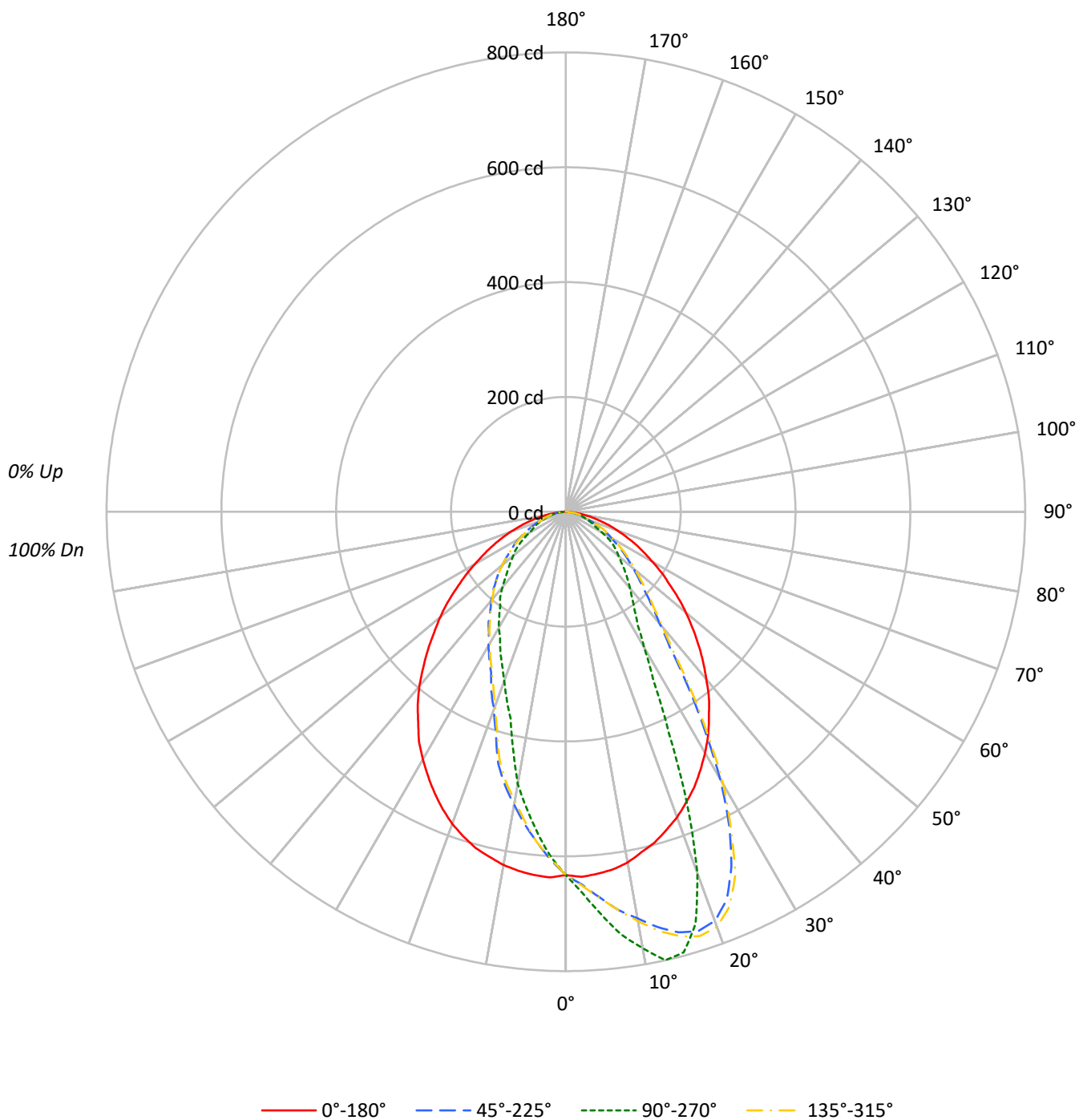
Lumens per Lamp: N/A
Luminaire Lumens: 1093.0 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P997720

CATALOG NUMBER: SA2XXRDP-B290DB40-4F0-XX-W2A-A

Luminous Intensity Polar Plot



TEST NUMBER: P997720

CATALOG NUMBER: SA2XXRDP-B290DB40-4F0-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	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°	10012	10012	10012	10012
5°	10057	11182	10092	8933
10°	9969	12406	10039	7743
15°	9774	13015	9939	6101
20°	9536	11283	9743	5279
25°	9243	7400	9442	4714
30°	8861	4981	9102	4266
35°	8392	4035	8663	3847
40°	7865	3587	8201	3560
45°	7300	3246	7607	3179
50°	6720	2955	7036	2945
55°	6077	2779	6405	2740
60°	5512	2324	5803	2295
65°	4989	1959	5285	2221
70°	4415	1810	4758	2097
75°	3816	1694	4165	1933
80°	3163	1559	3409	1723
85°	2470	1435	2706	1526

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 160°

Vertical Angle: 45°

Luminance: 10992 cd/sqm

TEST NUMBER: P997720

CATALOG NUMBER: SA2XXRDP-B290DB40-4F0-XX-W2A-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.0	5.5
10°-20°	167.5	15.3
20°-30°	215.5	19.7
30°-40°	204.5	18.7
40°-50°	175.2	16.0
50°-60°	133.4	12.2
60°-70°	84.2	7.7
70°-80°	42.0	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°	443.0	40.5
0°-40°	647.4	59.2
0°-60°	956.1	87.5
0°-90°	1093.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1093.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	632	632	632	632	632	
5°	633	704	635	562	633	60
15°	596	794	606	372	596	168
25°	529	424	541	270	529	243
35°	434	209	448	199	434	272
45°	326	145	340	142	326	252
55°	220	101	232	99	220	198
65°	133	52	141	59	133	132
75°	62	28	68	32	62	68
85°	14	8	15	8	14	16
90°	0	0	0	0	0	

TEST NUMBER: P997720

CATALOG NUMBER: SA2XXRDP-B290DB40-4F0-XX-W2A-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5
2.5°	636.4	639.1	640.4	642.1	646.1	648.7	652.7	653.6	653.1	654.9	650.1
5°	632.9	638.6	643.9	648.3	655.3	659.7	664.6	670.3	671.6	678.2	674.2
7.5°	628.1	636.4	643.9	652.7	663.2	669.0	676.4	685.2	689.2	697.1	699.3
10°	620.2	632.0	644.8	654.0	668.5	678.6	685.7	699.7	709.0	720.8	719.1
12.5°	607.4	622.8	639.9	655.3	674.2	680.8	694.0	708.5	720.4	731.4	741.0
15°	596.4	614.0	632.9	651.8	673.4	685.7	698.8	717.7	730.5	749.8	758.2
17.5°	581.5	603.9	626.3	647.4	672.9	687.0	703.2	721.7	740.6	759.1	765.7
20°	566.1	590.3	614.5	643.0	672.0	685.7	702.4	725.2	743.7	758.2	758.2
22.5°	547.6	577.1	604.8	632.0	663.7	683.5	700.6	727.4	740.6	743.7	731.8
25°	529.2	558.6	589.0	622.8	658.8	676.4	695.8	720.8	725.2	712.9	682.1
27.5°	507.2	540.2	574.5	610.9	648.7	670.7	688.3	705.0	696.6	663.7	615.8
30°	484.8	520.4	559.1	593.8	639.5	659.7	674.7	679.5	653.1	599.5	537.5
32.5°	461.5	496.2	537.1	578.9	625.0	644.3	654.0	641.3	592.9	525.2	449.6
35°	434.3	473.4	516.0	559.5	605.2	619.7	625.4	594.2	532.3	444.8	369.6
37.5°	409.6	448.8	494.5	538.9	583.3	591.2	585.4	536.7	458.0	371.4	298.0
40°	380.6	422.4	467.2	516.9	553.4	555.6	541.5	478.2	380.6	299.3	254.0
42.5°	353.8	396.0	440.8	491.4	519.1	511.6	492.7	409.6	317.8	258.0	221.5
45°	326.1	366.1	414.5	459.3	479.1	461.5	432.9	344.6	266.8	222.0	193.8
47.5°	299.3	336.7	384.6	427.7	431.2	411.4	377.6	288.8	231.2	195.1	172.3
50°	272.9	310.3	355.1	390.7	387.2	360.0	321.7	251.0	200.9	172.3	153.4
52.5°	246.6	280.4	323.9	352.1	337.1	310.7	272.9	212.7	175.4	150.3	135.8
55°	220.2	251.8	289.2	312.5	288.8	258.4	231.6	182.4	152.1	131.9	120.9
57.5°	198.2	223.3	257.6	271.6	243.1	219.3	196.0	156.9	131.9	117.4	104.6
60°	174.1	196.9	225.0	233.4	203.9	184.6	164.8	132.7	113.0	100.2	91.9
62.5°	153.4	172.3	193.8	193.8	167.9	153.4	138.5	111.2	94.9	84.8	80.9
65°	133.2	146.8	162.2	160.4	138.5	125.7	113.8	91.9	79.6	72.5	68.6
67.5°	113.4	123.9	134.1	127.9	112.1	101.1	90.1	74.3	65.9	61.1	55.8
70°	95.4	103.7	109.0	103.3	87.5	78.2	70.3	59.8	53.2	47.0	44.0
72.5°	80.0	83.5	85.3	78.2	65.0	59.8	54.1	46.6	40.9	37.8	36.9
75°	62.4	65.5	64.2	58.9	47.9	44.0	39.6	34.3	33.0	31.2	30.3
77.5°	48.8	48.8	46.6	41.8	34.3	31.2	29.4	26.8	25.5	25.1	24.2
80°	34.7	34.3	33.0	27.7	23.3	21.5	21.5	19.8	19.3	18.5	18.5
82.5°	22.9	22.9	21.1	16.7	15.4	14.9	14.5	13.6	13.6	13.2	13.2
85°	13.6	12.7	10.5	9.2	8.8	8.8	8.4	7.9	8.4	7.9	7.9
87.5°	6.2	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

TEST NUMBER: P997720

CATALOG NUMBER: SA2XXRDP-B290DB40-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5
2.5°	654.9	655.8	657.1	663.2	664.1	665.9	665.0	665.0	665.4	664.6	665.0
5°	683.0	684.3	690.9	698.4	700.2	698.4	700.6	703.7	703.7	703.7	702.8
7.5°	709.4	714.2	721.7	732.7	734.9	737.1	741.0	738.4	739.3	743.2	741.9
10°	734.9	741.9	750.3	759.5	764.3	767.4	769.2	773.1	782.4	771.8	775.8
12.5°	759.1	769.2	778.0	788.1	791.6	795.5	796.9	800.4	800.4	799.9	803.0
15°	774.9	784.1	792.0	798.6	799.5	798.6	797.7	798.2	799.5	794.2	797.3
17.5°	778.4	779.3	781.9	779.3	779.7	770.5	765.2	763.9	751.6	752.0	762.1
20°	761.3	746.3	742.4	727.9	719.1	695.3	694.5	687.9	661.9	669.8	668.1
22.5°	714.2	688.7	654.9	638.2	629.8	604.8	585.4	571.8	562.6	553.4	549.4
25°	652.3	610.9	563.0	530.1	525.2	501.9	466.3	449.6	429.9	423.7	434.3
27.5°	572.3	518.6	464.6	414.0	404.8	383.7	365.7	353.8	331.0	329.6	330.5
30°	463.7	409.6	364.4	331.4	308.5	298.9	287.0	278.2	269.0	272.5	273.4
32.5°	381.1	329.6	287.4	269.9	259.3	253.2	243.1	237.3	233.4	232.1	231.6
35°	302.8	268.6	249.7	232.5	226.4	222.0	214.5	211.9	208.3	208.8	208.8
37.5°	259.3	230.8	216.7	207.9	202.2	200.0	195.1	192.5	190.3	189.4	190.8
40°	223.7	203.9	195.1	187.2	182.4	181.5	178.9	175.8	173.2	173.6	174.9
42.5°	197.8	186.4	175.8	169.7	166.1	164.8	162.6	160.4	160.4	159.1	158.7
45°	177.1	167.9	159.1	153.4	151.2	149.4	146.8	146.4	144.6	145.0	145.5
47.5°	158.7	151.2	144.6	138.9	136.7	136.3	133.6	131.9	131.9	131.4	131.0
50°	142.0	134.5	128.8	125.7	122.6	121.7	121.3	120.9	120.0	120.0	120.4
52.5°	128.3	120.9	116.5	113.8	112.1	111.2	111.2	110.8	110.8	110.8	110.3
55°	113.4	107.2	103.7	102.8	102.0	101.5	101.1	100.2	99.8	100.7	99.8
57.5°	99.3	97.1	94.1	93.2	91.0	91.0	89.7	88.8	87.9	88.8	88.8
60°	88.3	85.3	83.5	80.9	79.1	77.4	75.2	74.7	73.8	73.4	73.0
62.5°	76.9	74.3	69.9	65.9	63.3	61.5	60.7	60.2	60.2	59.8	59.8
65°	64.2	58.0	55.8	54.5	54.1	53.6	52.7	52.3	52.7	52.3	52.7
67.5°	50.1	49.2	47.9	47.0	46.6	46.2	46.2	45.7	45.7	45.7	45.7
70°	43.5	41.3	40.9	40.0	40.0	39.6	39.6	39.6	39.6	39.1	40.0
72.5°	36.0	34.7	34.3	33.8	33.8	33.8	33.4	33.4	33.4	33.0	33.4
75°	29.4	29.0	28.1	28.1	27.7	28.1	27.7	27.7	27.3	27.7	27.7
77.5°	23.7	23.3	22.9	22.9	22.4	22.4	22.4	22.4	22.4	22.4	22.9
80°	18.0	17.6	17.1	17.6	17.1	17.6	17.1	17.1	17.6	17.1	17.1
82.5°	13.2	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	4.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	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: P997720

CATALOG NUMBER: SA2XXRDP-B290DB40-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5
2.5°	666.8	663.7	662.8	663.7	662.8	663.2	660.2	648.7	651.8	647.0	649.6
5°	704.6	701.9	696.2	695.3	694.5	693.6	689.2	679.1	675.1	668.5	668.1
7.5°	740.6	740.6	736.2	733.1	729.2	726.1	720.4	705.4	699.3	691.4	687.0
10°	776.2	764.8	769.6	766.5	756.9	755.1	744.6	735.8	723.9	716.0	709.0
12.5°	801.7	798.2	793.8	791.1	788.5	782.8	775.8	753.3	747.2	731.4	723.5
15°	800.8	798.6	799.9	799.9	799.1	797.7	792.0	775.8	765.2	749.8	736.2
17.5°	757.7	763.5	769.2	773.1	781.9	785.9	791.1	781.5	774.9	761.7	747.2
20°	682.6	696.6	713.4	716.9	724.8	748.1	758.6	767.0	769.6	765.2	753.3
22.5°	578.0	589.8	630.3	629.4	640.8	668.5	699.3	724.3	744.1	755.1	750.7
25°	452.7	469.4	491.0	507.2	544.6	585.9	624.1	664.1	698.4	728.7	736.2
27.5°	342.4	364.4	381.5	403.0	421.9	470.7	520.0	582.4	622.4	679.9	709.8
30°	276.9	287.0	304.2	314.3	323.5	360.9	416.7	478.2	548.5	614.9	666.3
32.5°	236.5	243.5	256.2	260.6	270.3	295.4	330.5	386.8	459.3	539.7	607.4
35°	212.3	219.8	222.4	226.4	234.3	250.1	274.3	315.1	380.6	459.3	540.2
37.5°	191.6	195.6	203.1	205.7	208.3	220.2	236.5	265.0	308.5	373.2	462.8
40°	177.1	179.3	183.3	185.5	187.2	195.6	210.1	229.4	261.5	310.7	393.4
42.5°	161.7	164.4	167.0	169.7	171.9	178.4	187.2	205.7	227.2	264.6	324.4
45°	146.8	148.6	151.6	153.4	156.5	161.7	169.7	182.4	201.7	225.5	273.8
47.5°	133.2	135.4	136.7	138.9	141.1	146.8	154.3	162.6	178.4	201.7	236.9
50°	120.9	123.5	125.3	125.7	127.5	132.7	138.9	148.1	158.2	176.2	207.0
52.5°	112.1	112.5	113.8	115.6	115.2	118.2	123.9	131.0	141.5	156.0	178.4
55°	102.0	103.3	104.2	104.6	104.6	107.2	110.3	116.9	125.3	137.1	156.0
57.5°	89.2	90.5	93.2	94.1	95.4	96.7	98.0	102.4	109.4	120.9	136.3
60°	76.0	76.9	79.6	81.3	82.2	85.7	87.5	91.0	94.9	103.3	117.8
62.5°	61.1	62.0	63.3	65.0	66.8	72.1	76.5	80.0	83.1	88.8	100.7
65°	53.2	53.6	54.5	54.9	55.4	57.6	61.5	66.4	72.1	76.5	83.5
67.5°	46.2	46.6	47.0	47.9	48.3	48.8	50.5	51.9	57.6	63.7	69.0
70°	39.6	40.4	40.9	40.9	41.3	42.2	43.1	44.8	46.6	49.7	56.3
72.5°	33.4	33.8	34.7	34.7	34.7	35.6	36.5	37.4	38.2	40.0	42.6
75°	27.7	28.6	28.6	28.6	29.0	29.0	29.9	30.8	31.6	33.0	33.8
77.5°	22.9	22.9	22.9	22.9	23.3	23.3	23.7	24.6	25.1	25.5	26.4
80°	17.1	17.6	17.6	17.6	18.0	18.0	18.0	18.9	19.3	19.3	20.2
82.5°	12.7	12.7	12.7	13.2	12.7	13.2	13.2	13.6	13.2	13.6	14.1
85°	7.9	7.9	7.9	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.8
87.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.4	4.0	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: P997720

CATALOG NUMBER: SA2XXRDP-B290DB40-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5
2.5°	645.7	643.5	643.5	642.1	642.1	635.1	635.1	637.3	634.7	631.6	627.2
5°	662.4	657.5	656.2	654.5	648.7	639.9	636.4	635.1	629.8	623.2	615.8
7.5°	678.2	670.3	666.3	662.4	654.9	642.6	635.6	630.7	622.8	612.7	603.0
10°	693.6	683.5	673.4	668.5	658.0	642.6	632.5	624.6	613.1	599.5	585.9
12.5°	707.6	686.5	684.8	675.1	659.7	642.1	626.8	615.3	600.8	585.0	569.2
15°	719.9	698.4	687.9	679.1	658.8	636.9	620.6	606.5	587.2	569.2	549.8
17.5°	726.1	702.8	695.8	681.3	660.6	632.0	610.1	592.9	571.8	550.3	528.3
20°	732.3	705.0	693.6	683.5	655.3	622.8	598.2	578.4	555.1	529.6	505.5
22.5°	735.3	705.0	691.4	677.3	650.1	612.7	583.7	560.4	533.1	507.2	478.2
25°	730.1	702.4	686.1	671.6	640.8	600.4	567.0	540.6	511.6	482.2	452.7
27.5°	716.9	696.2	677.3	662.4	628.1	584.6	549.4	519.5	489.6	456.7	426.8
30°	692.3	683.0	668.1	651.4	614.0	570.5	528.7	498.0	465.0	432.1	400.8
32.5°	654.0	661.9	652.3	637.8	597.3	551.2	506.8	475.6	439.5	403.9	375.4
35°	607.4	635.6	630.3	620.2	579.7	530.5	486.1	448.3	412.3	376.2	347.7
37.5°	556.4	599.1	603.5	597.3	559.5	509.4	460.6	423.7	386.8	350.3	321.3
40°	486.6	552.0	566.1	568.7	538.4	483.9	432.9	396.9	360.4	324.8	289.6
42.5°	422.4	505.0	522.6	533.6	511.6	458.9	407.4	367.4	331.4	299.3	264.2
45°	362.2	448.3	476.9	491.0	481.3	430.3	377.1	339.8	306.8	277.3	243.5
47.5°	300.2	386.8	426.8	449.2	449.2	401.3	348.1	311.2	279.5	254.5	224.6
50°	258.9	331.0	372.3	401.7	409.6	371.8	321.7	285.7	255.8	228.6	205.7
52.5°	220.6	285.3	319.5	350.3	373.2	340.2	292.3	259.8	230.3	204.8	186.8
55°	190.8	239.1	270.3	304.2	329.6	308.1	263.7	232.1	206.6	185.5	170.1
57.5°	162.2	204.4	229.9	259.8	287.0	270.7	235.1	207.9	185.5	167.0	153.4
60°	138.0	172.3	192.1	215.4	249.2	237.8	208.3	183.3	165.3	148.6	137.1
62.5°	117.4	144.6	161.3	178.0	208.8	203.5	180.6	161.3	145.9	131.9	122.2
65°	96.3	118.7	131.9	146.4	171.0	173.2	154.7	141.1	127.0	114.7	105.9
67.5°	77.8	95.4	107.2	119.6	139.3	145.5	132.7	121.3	109.4	99.3	91.4
70°	62.9	75.2	83.9	93.6	109.9	117.4	110.8	102.8	93.2	84.8	77.8
72.5°	49.7	57.6	62.9	70.3	83.5	91.0	90.5	83.5	76.5	70.8	65.0
75°	36.5	42.6	47.0	51.9	62.4	69.4	71.2	68.1	61.1	56.7	52.3
77.5°	27.7	31.2	33.4	36.9	44.4	50.5	53.2	52.3	47.5	44.0	40.9
80°	21.1	22.0	22.9	24.2	30.3	36.0	37.8	37.4	34.7	33.4	29.9
82.5°	14.9	15.4	15.8	16.3	18.5	23.3	25.1	25.9	23.7	22.4	19.3
85°	8.8	9.2	9.2	10.1	10.5	11.9	14.9	14.9	14.5	12.7	12.3
87.5°	4.4	4.4	4.0	4.0	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: P997720

CATALOG NUMBER: SA2XXRDP-B290DB40-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5
2.5°	625.4	625.9	627.2	623.2	617.1	614.5	606.5	605.2	603.9	603.9	605.2
5°	611.4	609.6	610.1	602.6	593.8	588.5	577.5	579.3	573.6	570.1	570.9
7.5°	596.0	591.2	590.7	581.1	570.1	560.4	549.0	546.3	541.1	534.9	532.3
10°	576.7	573.1	566.5	555.6	541.5	533.6	518.2	509.0	507.7	498.4	494.9
12.5°	556.9	550.7	544.1	528.7	512.9	500.2	488.8	478.6	471.6	463.7	458.4
15°	534.0	526.6	519.1	502.8	484.4	471.6	454.5	439.5	418.9	402.6	393.4
17.5°	509.0	500.6	490.5	472.5	454.5	436.9	405.2	387.7	373.2	363.5	357.8
20°	483.0	473.8	463.7	445.7	414.5	383.7	366.1	352.5	343.7	334.0	327.0
22.5°	455.8	446.1	435.1	407.0	374.0	352.5	338.9	326.1	313.4	308.1	304.6
25°	430.3	421.5	407.4	369.2	343.3	323.5	308.1	299.8	293.2	286.1	279.5
27.5°	403.9	387.7	367.9	335.8	319.5	299.3	288.3	282.2	270.7	265.9	262.8
30°	372.3	354.3	335.4	312.5	293.6	279.5	269.4	259.3	252.7	247.9	242.6
32.5°	340.2	323.1	311.2	287.4	273.4	258.9	249.2	243.1	233.4	230.3	228.1
35°	312.5	298.0	287.4	268.1	254.9	241.7	234.7	225.5	219.3	213.6	210.1
37.5°	285.3	277.3	266.4	250.1	236.0	225.5	215.8	212.7	204.4	201.3	197.8
40°	266.4	254.5	245.3	231.2	219.3	207.9	201.7	194.7	189.0	184.2	182.8
42.5°	243.5	234.7	229.4	214.0	201.7	195.1	187.7	179.8	175.4	171.4	166.6
45°	226.4	218.4	211.0	198.7	187.7	179.3	172.7	167.5	160.0	158.2	150.8
47.5°	208.3	200.4	194.7	182.4	172.3	164.4	159.5	152.5	146.4	142.4	138.9
50°	190.3	183.7	178.4	167.9	159.1	150.8	144.2	137.1	134.5	127.9	125.7
52.5°	173.2	168.8	163.1	153.0	144.2	137.1	130.1	124.4	120.4	116.9	114.3
55°	158.7	151.6	149.0	138.0	130.5	123.1	116.9	113.4	108.6	106.4	104.2
57.5°	142.4	138.5	134.1	125.7	117.4	110.3	105.9	100.7	98.0	95.4	93.6
60°	128.3	122.6	119.1	112.1	104.6	98.0	94.1	90.1	86.6	84.4	80.9
62.5°	112.1	107.7	105.5	98.0	91.9	85.7	82.2	78.2	75.6	71.6	67.2
65°	98.0	94.5	91.9	85.7	80.0	74.3	70.8	65.9	62.4	60.2	59.8
67.5°	85.7	83.1	79.1	73.4	67.7	63.3	59.3	55.4	54.9	54.1	54.1
70°	72.1	69.4	67.2	61.1	56.3	51.4	50.5	49.2	47.9	47.5	46.6
72.5°	60.2	58.0	55.4	50.1	45.3	44.0	43.1	42.2	40.9	40.4	40.0
75°	48.8	45.7	44.0	39.1	37.8	36.9	36.0	34.7	33.8	33.4	32.5
77.5°	37.4	34.3	34.3	31.6	30.8	29.4	28.6	27.7	27.3	26.4	26.4
80°	26.4	26.4	25.5	24.2	22.9	22.4	21.1	20.7	20.2	20.7	19.8
82.5°	19.3	17.6	17.6	16.7	15.8	15.4	14.5	14.5	14.1	14.1	14.1
85°	11.0	11.0	10.5	9.7	9.2	9.2	8.8	8.8	8.4	8.4	7.9
87.5°	4.4	4.0	4.4	4.0	4.0	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: P997720

CATALOG NUMBER: SA2XXRDP-B290DB40-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5
2.5°	605.2	604.3	601.7	602.6	601.3	601.3	600.4	600.4	600.4	602.6	601.3
5°	572.3	569.2	566.1	564.8	563.5	562.2	562.2	561.7	565.7	564.8	568.3
7.5°	531.4	530.5	524.4	524.4	522.2	521.3	523.5	523.9	524.4	525.2	527.4
10°	494.9	492.7	483.9	484.8	483.5	481.7	483.0	482.2	485.2	486.1	485.2
12.5°	451.8	447.9	438.2	433.4	428.1	424.1	429.0	425.5	437.8	441.3	451.0
15°	394.7	387.2	380.6	380.6	375.8	372.3	374.5	378.4	381.1	385.0	386.8
17.5°	356.5	353.4	348.1	345.0	343.7	342.4	342.4	344.1	349.9	349.4	352.9
20°	323.9	322.2	319.5	315.6	314.3	313.4	313.4	313.4	317.3	320.9	323.1
22.5°	301.5	300.2	298.4	293.2	290.5	289.6	291.8	293.2	296.2	298.9	301.1
25°	279.1	276.0	272.9	271.2	269.9	269.9	270.7	271.2	272.5	273.8	276.5
27.5°	260.6	258.4	254.0	249.2	249.2	247.9	248.8	249.7	252.7	257.1	259.3
30°	240.0	239.5	237.8	236.0	234.3	233.4	235.1	236.5	236.9	239.1	239.1
32.5°	225.0	222.0	218.9	217.1	216.2	215.8	216.2	218.0	218.0	220.6	223.7
35°	210.1	208.3	205.3	202.2	201.3	199.1	200.9	202.6	205.7	207.0	208.3
37.5°	193.8	191.6	190.3	189.4	187.7	188.1	186.8	189.4	192.1	191.6	192.5
40°	181.5	177.6	173.6	173.2	172.7	172.3	172.3	172.7	174.5	176.2	178.9
42.5°	165.7	164.4	160.9	157.4	156.5	155.6	154.7	156.5	160.0	163.1	164.4
45°	149.4	147.7	146.8	144.2	142.4	142.0	141.1	143.3	146.4	147.7	148.6
47.5°	134.5	134.1	131.4	131.9	130.5	131.0	130.5	131.9	131.9	133.2	134.1
50°	124.4	123.1	121.7	120.9	119.6	119.6	119.1	119.6	121.3	123.1	122.6
52.5°	114.3	112.1	111.6	111.2	110.3	111.2	109.9	110.3	112.1	113.0	112.5
55°	102.4	102.0	101.1	100.2	99.8	99.3	99.3	99.3	101.1	102.4	102.8
57.5°	93.2	91.0	89.2	89.2	87.5	87.0	87.9	88.3	89.7	90.5	91.4
60°	80.4	79.6	76.9	75.6	73.0	72.5	72.5	74.3	76.5	79.6	80.4
62.5°	66.8	65.5	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.5	65.5
65°	59.3	59.8	59.3	58.9	59.3	59.3	58.9	58.9	58.9	59.3	59.8
67.5°	53.2	52.7	53.2	52.7	52.3	52.3	51.9	52.3	52.7	53.2	53.2
70°	46.2	46.2	45.7	46.2	45.7	45.3	44.8	44.8	45.7	46.2	46.2
72.5°	39.6	39.6	39.1	39.1	38.2	38.2	38.7	38.2	38.2	39.6	39.6
75°	33.0	32.5	32.1	32.1	31.6	31.6	31.6	31.2	32.1	32.1	32.5
77.5°	25.9	25.9	25.9	25.5	25.5	25.1	25.1	25.5	25.5	25.5	25.9
80°	19.8	19.8	19.8	19.3	18.9	18.9	18.9	18.9	18.9	19.3	18.9
82.5°	13.6	13.6	13.6	13.6	13.6	13.2	13.2	13.2	13.6	13.6	13.2
85°	8.4	7.9	8.4	8.4	7.9	8.4	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: P997720

CATALOG NUMBER: SA2XXRDP-B290DB40-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5	632.5
2.5°	602.6	604.8	603.9	599.1	603.9	605.2	607.9	610.5	612.3	614.9	617.1
5°	564.8	569.2	571.8	569.2	578.0	579.3	585.4	589.0	594.2	598.6	602.2
7.5°	529.2	532.7	538.0	538.9	544.1	550.3	559.1	567.9	576.2	580.6	584.6
10°	491.0	497.1	505.0	503.3	511.2	520.8	530.1	544.1	551.2	559.1	566.1
12.5°	452.7	456.7	467.2	470.7	482.2	489.6	502.4	511.2	528.7	538.0	544.1
15°	385.9	402.2	415.4	431.2	446.1	460.2	471.6	487.4	502.8	509.9	520.0
17.5°	355.6	363.0	371.0	378.9	398.2	423.3	443.5	460.6	473.8	483.0	494.9
20°	323.9	331.4	340.2	347.7	359.5	377.6	402.6	432.1	447.9	457.5	469.0
22.5°	301.5	308.5	314.3	320.9	330.1	343.3	362.2	398.6	419.7	431.6	441.7
25°	277.3	286.1	292.3	297.1	304.6	319.1	334.5	355.1	392.9	402.2	416.2
27.5°	260.6	263.3	270.3	277.8	285.3	293.2	309.0	326.6	352.1	372.3	389.4
30°	240.9	247.5	254.0	257.1	263.7	275.1	284.8	303.7	323.5	339.3	360.0
32.5°	225.9	229.9	234.3	241.7	247.9	255.8	265.5	281.3	298.0	308.1	323.9
35°	209.2	211.9	221.1	224.2	230.3	238.2	247.9	260.2	278.2	286.1	297.6
37.5°	193.4	199.5	202.2	209.2	214.9	222.8	229.9	243.9	255.8	265.0	275.6
40°	181.1	183.7	188.6	194.7	199.5	205.7	214.5	224.6	237.3	244.8	254.0
42.5°	166.1	168.3	174.5	178.0	185.9	191.6	196.9	209.2	220.6	226.4	235.6
45°	149.9	155.2	159.1	166.1	170.5	177.6	184.2	193.0	203.5	210.1	215.4
47.5°	135.8	141.1	145.0	151.6	158.7	161.7	168.8	178.0	187.7	193.0	200.4
50°	124.4	126.1	133.6	136.7	144.2	150.3	155.2	163.1	173.6	176.7	182.8
52.5°	113.4	114.7	119.6	123.5	130.1	135.4	141.5	149.0	157.8	162.6	167.5
55°	103.7	104.6	106.8	111.2	115.6	122.2	127.9	134.9	142.4	147.7	152.1
57.5°	92.7	94.5	96.3	98.9	103.3	109.4	115.6	122.2	128.3	131.9	137.6
60°	80.0	82.6	85.7	88.8	91.9	96.3	103.3	109.4	115.2	118.2	122.6
62.5°	66.4	71.6	74.3	77.8	80.4	84.4	89.7	96.7	100.7	104.6	108.1
65°	59.8	60.2	60.7	64.2	69.0	73.0	77.8	83.1	89.2	91.9	94.5
67.5°	53.2	53.6	54.5	54.9	56.7	61.1	66.4	72.1	76.9	78.7	81.3
70°	46.6	46.6	48.3	48.8	49.2	49.7	54.1	59.8	64.2	66.4	69.4
72.5°	39.6	40.0	40.9	41.3	42.2	43.1	44.4	47.5	52.7	54.9	58.5
75°	32.5	33.0	33.4	33.8	35.2	35.6	36.9	38.7	40.9	43.5	45.7
77.5°	25.9	25.9	26.4	27.3	28.1	28.6	29.9	30.8	31.6	33.0	34.7
80°	19.3	19.8	19.8	20.7	20.7	21.1	21.5	22.9	23.7	24.6	25.5
82.5°	13.2	14.1	14.1	14.1	14.5	14.9	15.4	15.4	16.3	16.7	18.0
85°	7.9	8.4	8.4	8.4	7.9	8.8	8.8	9.2	9.2	9.2	9.7
87.5°	3.1	2.6	3.1	3.1	3.1	3.5	3.1	3.1	3.5	4.0	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: P997720

CATALOG NUMBER: SA2XXRDP-B290DB40-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	632.5	632.5	632.5	632.5
2.5°	621.1	619.7	627.6	636.4
5°	608.3	610.5	620.6	632.9
7.5°	595.1	600.0	611.8	628.1
10°	576.7	585.4	603.5	620.2
12.5°	558.6	570.5	587.6	607.4
15°	538.4	551.6	572.7	596.4
17.5°	516.0	530.9	555.6	581.5
20°	492.3	512.0	538.0	566.1
22.5°	465.9	489.6	516.4	547.6
25°	440.4	466.3	493.1	529.2
27.5°	415.4	440.8	470.7	507.2
30°	390.3	413.6	445.7	484.8
32.5°	363.5	387.7	421.5	461.5
35°	338.9	363.0	394.7	434.3
37.5°	312.5	338.4	368.8	409.6
40°	281.7	312.1	341.5	380.6
42.5°	256.2	288.3	316.9	353.8
45°	236.0	266.4	290.1	326.1
47.5°	217.1	241.7	265.9	299.3
50°	199.1	218.0	243.1	272.9
52.5°	180.6	196.9	218.4	246.6
55°	163.9	179.3	198.7	220.2
57.5°	148.6	159.5	178.9	198.2
60°	131.4	142.8	157.8	174.1
62.5°	116.9	125.7	139.8	153.4
65°	101.5	109.9	120.4	133.2
67.5°	87.5	94.9	103.3	113.4
70°	74.7	80.4	86.6	95.4
72.5°	61.1	67.2	73.0	80.0
75°	50.1	52.7	57.6	62.4
77.5°	38.7	42.2	44.8	48.8
80°	27.7	30.8	31.6	34.7
82.5°	18.5	20.2	22.0	22.9
85°	10.5	11.4	13.2	13.6
87.5°	4.0	4.4	5.3	6.2
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P997720

CATALOG NUMBER: SA2XXRDP-B290DB40-4F0-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	19.04	20.49	19.41	20.81	21.12	13.46	14.91	13.82	15.22	15.54
	3H	20.37	21.67	20.75	22.00	22.36	14.58	15.88	14.96	16.21	16.57
	4H	20.80	22.01	21.20	22.36	22.74	15.04	16.26	15.45	16.61	16.99
	6H	21.07	22.19	21.48	22.56	22.95	15.42	16.54	15.83	16.91	17.30
	8H	21.14	22.21	21.57	22.60	23.00	15.55	16.61	15.97	17.00	17.40
	12H	21.18	22.20	21.61	22.58	23.01	15.63	16.65	16.06	17.03	17.46
4H	2H	19.02	20.23	19.42	20.58	20.96	14.14	15.36	14.54	15.70	16.08
	3H	20.46	21.47	20.87	21.87	22.27	15.43	16.44	15.84	16.84	17.24
	4H	20.97	21.87	21.40	22.29	22.73	15.99	16.89	16.42	17.31	17.75
	6H	21.34	22.13	21.80	22.57	23.03	16.47	17.25	16.93	17.70	18.16
	8H	21.45	22.19	21.92	22.63	23.10	16.63	17.37	17.10	17.81	18.28
	12H	21.53	22.18	22.01	22.66	23.13	16.75	17.41	17.24	17.89	18.36
8H	4H	20.95	21.69	21.42	22.13	22.60	16.31	17.04	16.77	17.48	17.95
	6H	21.37	21.98	21.87	22.47	22.95	16.89	17.49	17.39	17.99	18.47
	8H	21.52	22.06	22.03	22.57	23.06	17.12	17.66	17.64	18.17	18.66
	12H	21.63	22.11	22.14	22.60	23.17	17.31	17.79	17.82	18.28	18.85
12H	4H	20.93	21.58	21.42	22.06	22.54	16.34	17.00	16.83	17.48	17.95
	6H	21.35	21.89	21.86	22.40	22.89	16.95	17.49	17.47	18.00	18.49
	8H	21.53	22.00	22.04	22.50	23.06	17.23	17.71	17.75	18.21	18.77

END OF REPORT