

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: P997621

Luminaire Tested: SA2XXDP-B485DB50-4F0-XX-W2A-A

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997621
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-B485DB50-4F0-XX-W2A-A
Description: Define 2 Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

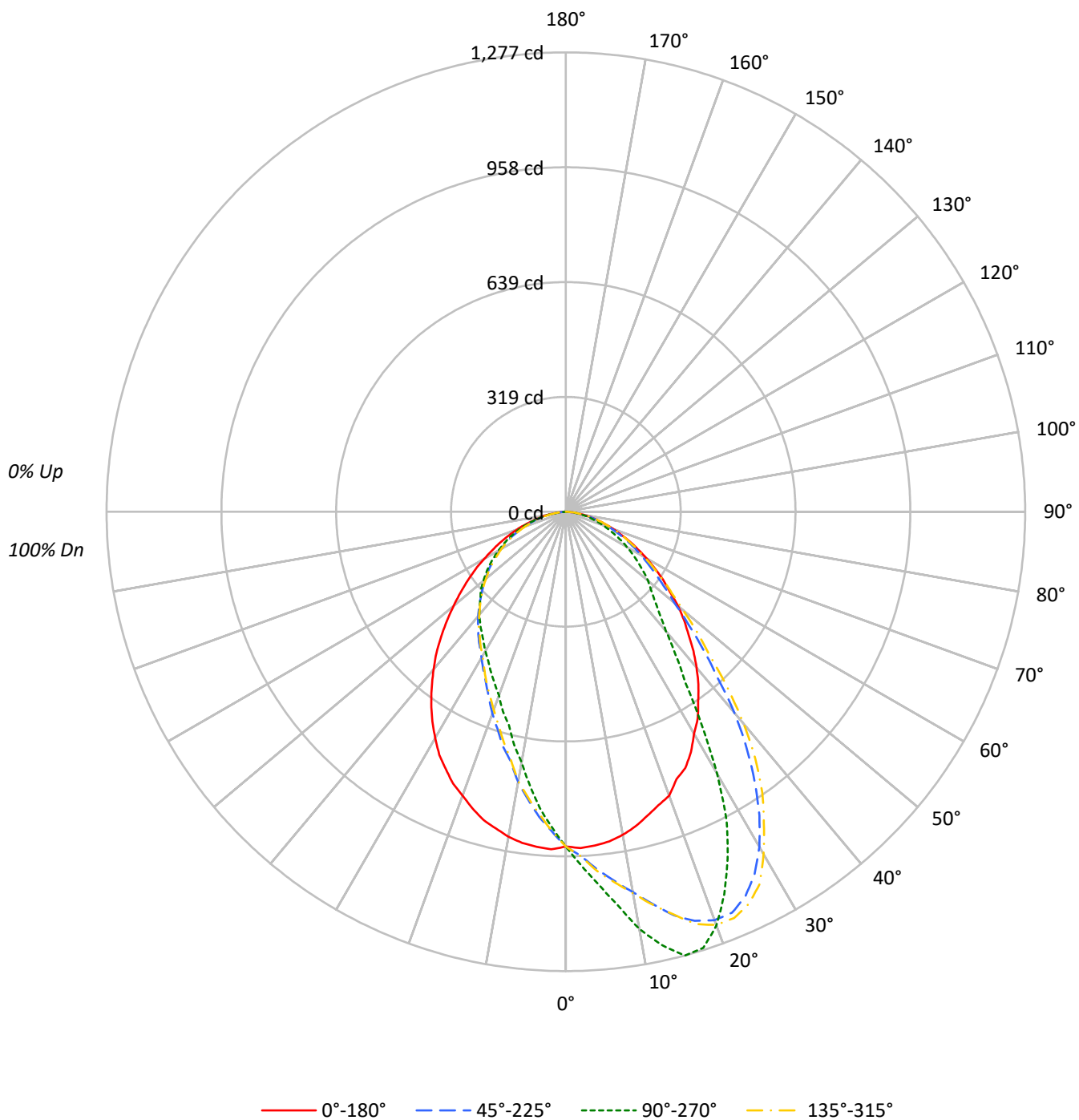
Lumens per Lamp: N/A
Luminaire Lumens: 2053.0 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.09 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
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
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°	14729	14729	14729	14729
5°	14797	16513	14854	13138
10°	14657	18923	14749	11370
15°	14334	20934	14534	10046
20°	14145	20615	14145	9157
25°	13728	18589	13791	8595
30°	13021	15361	13270	8183
35°	12398	11194	12605	7892
40°	11675	8941	11809	7730
45°	10777	7813	10951	7508
50°	10006	7346	10023	7363
55°	9118	6770	9179	7164
60°	8174	6205	8288	6860
65°	7341	5652	7472	6562
70°	6521	5133	6688	6123
75°	5596	4550	5816	5425
80°	4567	3911	4886	4366
85°	3378	3505	3632	2597

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 155°

Vertical Angle: 45°

Luminance: 19230 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	4.3
10°-20°	258.0	12.6
20°-30°	374.4	18.2
30°-40°	394.7	19.2
40°-50°	349.2	17.0
50°-60°	278.9	13.6
60°-70°	189.4	9.2
70°-80°	96.9	4.7
80°-90°	22.9	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°	721.0	35.1
0°-40°	1115.7	54.3
0°-60°	1743.8	84.9
0°-90°	2053.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2053.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	930	930	930	930	930	
5°	931	1039	935	827	931	88
15°	875	1277	887	613	875	247
25°	786	1064	790	492	786	359
35°	642	579	652	408	642	401
45°	481	349	489	335	481	373
55°	330	245	333	260	330	295
65°	196	151	200	175	196	195
75°	92	74	95	89	92	98
85°	19	19	20	14	19	23
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°	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5
2.5°	935.5	937.7	941.2	942.0	949.1	954.8	961.3	961.3	963.4	962.7	957.0
5°	931.2	937.7	947.0	954.8	967.7	973.4	982.0	988.4	994.2	998.5	997.7
7.5°	924.1	935.5	949.1	964.1	981.3	991.3	1003.5	1014.9	1022.8	1029.9	1034.9
10°	911.9	931.2	949.8	969.9	992.0	1005.6	1019.9	1034.9	1047.1	1060.7	1073.6
12.5°	895.5	923.4	946.3	972.7	999.9	1014.9	1037.8	1049.2	1072.8	1107.2	1116.5
15°	874.7	912.6	934.1	967.7	1003.5	1015.6	1047.1	1065.7	1114.3	1135.8	1161.5
17.5°	855.4	897.6	926.2	964.8	999.9	1023.5	1054.3	1092.2	1132.9	1163.7	1192.3
20°	839.7	880.4	914.8	957.7	1002.0	1032.1	1064.3	1110.0	1154.4	1185.9	1208.0
22.5°	803.9	856.1	896.2	944.1	997.7	1039.2	1070.0	1120.1	1168.0	1187.3	1206.6
25°	786.0	831.1	877.6	931.9	994.9	1044.2	1070.7	1126.5	1168.7	1175.8	1180.1
27.5°	753.1	803.9	858.3	920.5	994.2	1035.7	1069.3	1120.1	1153.7	1148.7	1135.8
30°	712.4	774.6	834.7	901.9	984.2	1029.2	1060.7	1107.2	1124.3	1098.6	1075.7
32.5°	682.3	741.0	807.5	885.5	972.7	1015.6	1046.4	1082.9	1086.4	1039.9	1001.3
35°	641.6	706.6	781.7	864.0	953.4	992.0	1020.6	1042.8	1025.6	960.6	914.8
37.5°	605.1	669.5	749.6	833.2	926.9	964.8	987.7	991.3	949.1	891.9	824.7
40°	565.0	631.5	715.2	803.2	897.6	930.5	944.8	934.1	873.3	806.8	728.8
42.5°	525.0	590.8	680.9	771.0	860.4	888.3	894.0	864.7	790.3	712.4	622.3
45°	481.4	550.0	640.1	731.0	817.5	833.2	834.0	791.8	703.8	622.3	538.6
47.5°	445.6	509.2	598.6	689.5	762.4	773.2	768.9	720.2	624.4	532.8	459.9
50°	406.3	467.0	555.7	645.1	707.4	710.2	699.5	630.1	536.4	452.7	394.8
52.5°	364.1	425.6	507.1	592.9	648.7	644.4	623.7	549.3	461.3	391.9	347.6
55°	330.4	384.8	461.3	545.0	584.3	572.2	549.3	473.5	404.1	345.5	306.8
57.5°	293.2	341.2	416.3	489.2	512.1	500.7	477.8	407.0	342.6	298.3	272.5
60°	258.2	301.8	367.6	428.4	446.3	434.1	407.7	344.0	297.5	260.3	241.0
62.5°	226.0	263.9	319.0	374.8	381.9	369.8	346.9	295.4	255.3	226.0	211.7
65°	196.0	231.7	276.1	318.3	324.7	311.8	288.2	251.0	217.4	198.8	185.2
67.5°	166.6	195.3	234.6	265.4	268.9	256.8	237.5	207.4	186.7	166.6	156.6
70°	140.9	162.4	193.1	218.1	219.6	208.1	198.1	170.9	155.2	140.9	133.0
72.5°	115.9	130.9	154.5	173.1	173.8	166.6	157.4	140.2	126.6	116.6	108.7
75°	91.5	104.4	118.7	135.2	134.5	128.7	121.6	110.9	99.4	93.0	89.4
77.5°	70.1	78.0	89.4	100.1	100.1	97.3	93.0	85.1	78.0	71.5	67.9
80°	50.1	55.1	64.4	67.9	69.4	68.7	65.1	59.4	56.5	51.5	50.1
82.5°	32.2	35.8	40.1	43.6	45.8	44.3	43.6	40.8	36.5	35.0	33.6
85°	18.6	20.0	22.2	24.3	25.0	24.3	25.7	23.6	21.5	21.5	20.7
87.5°	7.9	8.6	10.0	10.0	10.7	10.7	10.0	10.7	10.7	10.0	9.3
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°	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5
2.5°	967.0	967.7	969.1	976.3	979.9	980.6	977.7	984.2	986.3	984.2	982.7
5°	1012.8	1017.1	1025.6	1034.9	1034.2	1034.9	1039.2	1043.5	1045.0	1039.2	1041.4
7.5°	1052.8	1061.4	1070.7	1085.0	1085.0	1092.2	1095.0	1098.6	1107.2	1102.9	1101.5
10°	1098.6	1110.0	1127.2	1150.1	1150.8	1158.0	1165.1	1176.6	1180.1	1177.3	1178.7
12.5°	1155.8	1178.0	1179.4	1204.4	1215.9	1217.3	1228.8	1226.6	1233.8	1233.8	1245.9
15°	1180.8	1215.2	1234.5	1258.8	1266.0	1257.4	1266.7	1276.7	1277.4	1277.4	1276.7
17.5°	1225.9	1239.5	1258.8	1271.7	1274.5	1274.5	1275.3	1279.5	1276.7	1271.0	1275.3
20°	1235.2	1240.9	1248.1	1246.6	1248.1	1240.9	1233.8	1226.6	1227.3	1223.8	1234.5
22.5°	1218.0	1216.6	1200.2	1189.4	1189.4	1175.1	1161.5	1155.1	1148.7	1150.8	1154.4
25°	1175.1	1153.0	1132.9	1117.2	1113.6	1090.7	1072.1	1066.4	1055.7	1064.3	1065.7
27.5°	1106.5	1081.4	1049.2	1035.7	1017.1	1007.8	994.9	977.7	955.5	968.4	966.3
30°	1032.8	995.6	969.1	936.2	906.9	904.8	880.4	851.8	840.4	840.4	846.8
32.5°	950.5	901.2	862.6	816.1	787.5	775.3	746.0	717.4	723.8	702.4	710.2
35°	854.7	789.6	741.0	695.9	674.5	660.2	622.3	606.5	589.4	579.3	597.9
37.5°	763.2	688.1	625.8	576.5	568.6	542.9	517.1	507.1	497.1	501.4	500.7
40°	651.6	585.1	529.3	490.6	477.1	464.9	447.7	435.6	429.1	432.7	433.4
42.5°	550.7	494.9	453.5	426.3	414.8	406.3	397.7	387.7	385.5	385.5	388.4
45°	472.8	427.0	399.1	376.9	370.5	364.1	357.6	353.3	351.9	349.0	351.2
47.5°	410.5	374.1	356.9	340.4	333.3	331.9	326.1	324.0	321.1	320.4	321.1
50°	358.3	335.4	319.7	310.4	305.4	303.3	300.4	296.1	294.7	298.3	296.8
52.5°	321.9	300.4	291.8	282.5	279.7	276.8	272.5	273.2	272.5	271.1	271.1
55°	285.4	271.8	263.2	256.1	255.3	252.5	248.9	247.5	246.8	245.3	247.5
57.5°	256.1	245.3	237.5	231.0	228.2	228.2	224.6	221.7	221.7	221.0	221.7
60°	226.7	216.0	211.0	204.6	202.4	201.7	199.5	198.1	196.0	196.0	196.0
62.5°	199.5	191.0	185.2	179.5	180.2	176.7	173.8	172.4	172.4	173.1	173.1
65°	173.8	168.1	160.9	155.9	154.5	153.8	152.3	151.6	149.5	150.9	150.9
67.5°	150.2	142.3	138.0	135.9	133.7	133.0	131.6	130.2	129.5	128.7	130.2
70°	126.6	120.2	116.6	115.2	113.0	112.3	111.6	109.4	110.1	110.9	111.6
72.5°	105.1	99.4	98.7	94.4	94.4	94.4	91.5	93.0	92.3	90.8	92.3
75°	83.0	80.1	78.7	76.5	77.2	76.5	75.8	73.7	73.7	74.4	75.1
77.5°	65.8	62.9	62.2	60.1	58.6	60.1	58.6	57.9	57.9	58.6	58.6
80°	48.6	47.2	45.1	45.1	45.1	44.3	44.3	44.3	43.6	42.9	43.6
82.5°	32.2	32.2	31.5	30.8	31.5	30.0	30.8	30.8	30.8	30.8	30.8
85°	20.7	20.0	20.0	19.3	19.3	19.3	20.0	18.6	18.6	19.3	19.3
87.5°	9.3	9.3	9.3	10.0	9.3	9.3	9.3	10.0	9.3	9.3	9.3
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°	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5
2.5°	986.3	981.3	977.0	977.7	981.3	978.4	971.3	962.0	958.4	954.1	958.4
5°	1045.7	1041.4	1032.8	1033.5	1031.4	1028.5	1017.1	1002.8	1002.8	991.3	989.9
7.5°	1104.3	1097.9	1092.2	1090.7	1082.9	1077.1	1067.1	1047.1	1039.2	1025.6	1017.8
10°	1170.1	1165.1	1158.7	1150.8	1146.5	1136.5	1120.1	1090.7	1076.4	1057.8	1044.2
12.5°	1236.6	1235.9	1221.6	1205.9	1205.2	1189.4	1178.0	1138.6	1119.3	1094.3	1062.1
15°	1278.8	1275.3	1267.4	1259.5	1261.7	1244.5	1218.8	1172.3	1159.4	1129.3	1095.0
17.5°	1278.1	1278.1	1276.0	1274.5	1272.4	1267.4	1253.1	1222.3	1201.6	1163.7	1131.5
20°	1237.3	1246.6	1248.8	1248.1	1255.2	1258.8	1258.1	1238.8	1222.3	1188.7	1155.8
22.5°	1155.8	1177.3	1186.6	1192.3	1207.3	1215.2	1233.8	1226.6	1222.3	1197.3	1169.4
25°	1080.0	1087.2	1115.0	1116.5	1137.2	1156.5	1175.1	1187.3	1203.0	1193.7	1170.1
27.5°	982.0	998.5	1018.5	1033.5	1037.8	1077.1	1107.9	1130.8	1166.5	1169.4	1161.5
30°	871.2	879.0	911.9	931.9	954.8	983.4	1027.8	1067.1	1099.3	1128.6	1138.6
32.5°	736.0	768.2	787.5	811.8	831.8	882.6	937.0	987.7	1024.9	1074.3	1095.7
35°	612.2	637.3	670.2	680.2	716.7	759.6	830.4	895.5	952.0	1002.0	1045.7
37.5°	510.0	530.0	565.0	580.8	602.2	657.3	716.7	797.5	865.4	926.9	981.3
40°	439.9	454.9	481.4	486.4	504.2	554.3	602.2	678.0	768.2	851.1	910.5
42.5°	391.9	399.1	417.0	423.4	434.9	468.5	511.4	582.9	666.6	752.4	836.1
45°	357.6	362.6	373.4	379.1	393.4	408.4	443.4	500.7	566.5	653.0	743.1
47.5°	326.9	333.3	337.6	341.2	349.0	365.5	388.4	430.6	493.5	572.9	660.2
50°	301.1	303.3	311.1	311.8	316.8	327.6	349.0	374.8	424.8	489.2	573.6
52.5°	275.4	277.5	282.5	287.5	289.7	298.3	312.6	334.0	371.2	422.0	497.1
55°	249.6	252.5	257.5	261.1	263.2	270.4	278.9	299.7	329.0	364.8	426.3
57.5°	223.9	230.3	231.7	233.9	237.5	245.3	253.2	265.4	288.2	321.1	366.2
60°	199.5	201.7	206.7	208.8	212.4	216.7	226.7	236.0	252.5	278.2	319.0
62.5°	174.5	179.5	181.7	183.8	186.7	191.7	198.1	208.1	222.4	243.2	275.4
65°	153.1	153.8	158.1	160.9	163.8	167.4	173.8	183.1	191.7	211.0	234.6
67.5°	132.3	133.7	135.2	138.0	141.6	145.2	150.9	155.9	166.6	179.5	198.1
70°	112.3	112.3	115.9	118.0	117.3	121.6	125.9	131.6	139.5	151.6	166.6
72.5°	94.4	93.7	96.6	97.3	98.7	101.6	104.4	110.1	114.4	123.7	135.2
75°	75.1	76.5	78.0	78.0	80.1	82.3	85.1	88.0	93.0	98.7	107.3
77.5°	59.4	59.4	60.8	61.5	63.7	62.9	65.8	68.7	72.2	77.2	83.7
80°	43.6	45.1	45.1	45.1	45.8	46.5	49.4	51.5	53.6	57.2	60.1
82.5°	30.8	30.8	32.2	32.2	32.2	33.6	33.6	34.3	35.8	37.9	40.1
85°	19.3	19.3	19.3	20.0	19.3	20.0	21.5	20.7	21.5	22.9	22.9
87.5°	9.3	9.3	9.3	9.3	9.3	10.0	9.3	10.0	10.7	10.7	10.7
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: P997621

CATALOG NUMBER: SA2XXDP-B485DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5
2.5°	954.8	951.3	949.1	950.5	946.3	935.5	935.5	939.1	934.8	930.5	924.1
5°	981.3	974.1	969.9	969.1	959.1	942.0	938.4	934.8	925.5	915.5	904.8
7.5°	1007.0	994.2	987.0	982.0	967.7	945.5	936.2	928.4	913.3	898.3	884.7
10°	1028.5	1009.9	1001.3	993.5	974.9	947.0	931.9	917.6	898.3	879.0	861.9
12.5°	1045.7	1024.2	1013.5	1002.0	979.2	942.7	924.1	901.2	881.9	856.1	839.0
15°	1074.3	1029.9	1019.9	1009.2	985.6	935.5	912.6	886.9	860.4	826.1	807.5
17.5°	1097.2	1037.8	1037.1	1014.2	983.4	932.7	897.6	864.0	835.4	801.1	771.7
20°	1110.8	1050.0	1038.5	1014.9	976.3	913.3	876.9	839.7	808.9	767.4	738.1
22.5°	1122.2	1067.1	1037.1	1008.5	961.3	906.9	853.3	818.2	776.0	731.0	703.1
25°	1126.5	1070.7	1039.2	1006.3	950.5	888.3	827.5	789.6	742.4	701.6	663.7
27.5°	1127.2	1070.0	1031.4	997.0	935.5	864.0	801.8	761.7	709.5	662.3	624.4
30°	1120.1	1062.1	1027.1	989.9	921.2	841.8	770.3	726.0	670.2	623.0	583.6
32.5°	1098.6	1046.4	1017.8	977.0	902.6	811.1	740.3	690.9	632.3	585.8	547.9
35°	1062.8	1027.1	995.6	957.7	878.3	782.5	710.2	652.3	592.9	548.6	512.8
37.5°	1018.5	999.2	969.9	932.7	850.4	756.7	676.6	612.2	552.9	510.0	474.9
40°	958.4	963.4	934.8	901.2	817.5	721.7	633.0	571.5	515.7	475.6	441.3
42.5°	893.3	914.1	897.6	865.4	781.0	683.0	600.8	532.8	478.5	437.0	408.4
45°	823.2	859.0	849.0	825.4	743.1	642.3	555.0	489.2	441.3	401.2	376.2
47.5°	746.7	797.5	797.5	780.3	700.9	601.5	515.7	448.4	401.2	372.6	348.3
50°	668.7	726.0	735.3	723.8	653.7	555.0	467.8	407.0	366.2	338.3	320.4
52.5°	587.2	653.7	670.9	665.2	603.7	510.7	428.4	369.1	331.9	307.5	291.8
55°	509.2	586.5	605.1	607.2	550.0	462.0	384.8	332.6	296.8	280.4	266.8
57.5°	435.6	510.0	530.7	534.3	495.7	417.7	344.0	298.3	266.1	252.5	241.7
60°	372.6	434.9	462.0	469.9	436.3	366.2	306.1	261.8	237.5	224.6	214.6
62.5°	321.1	371.2	399.8	402.0	386.9	321.1	266.8	229.6	208.8	197.4	192.4
65°	271.1	316.1	333.3	341.9	329.7	278.2	230.3	199.5	183.1	173.1	168.1
67.5°	231.0	259.6	273.9	285.4	273.2	234.6	196.0	170.9	158.8	148.8	145.9
70°	189.5	213.1	223.9	235.3	224.6	195.3	167.4	144.5	133.7	125.9	122.3
72.5°	151.6	170.2	180.2	187.4	181.0	156.6	133.7	118.0	110.1	104.4	102.3
75°	120.2	133.0	138.8	143.8	140.9	122.3	108.0	95.1	88.0	83.0	81.5
77.5°	91.5	100.8	107.3	108.7	105.1	93.0	80.8	73.0	67.2	64.4	62.9
80°	65.1	70.8	74.4	76.5	73.0	67.9	59.4	53.6	48.6	45.1	44.3
82.5°	43.6	46.5	49.4	48.6	47.2	42.9	37.9	35.0	32.9	30.0	30.0
85°	25.0	25.7	27.2	27.9	27.2	24.3	21.5	20.0	18.6	16.5	16.5
87.5°	10.7	11.4	11.4	12.2	10.7	10.7	9.3	7.9	7.9	7.2	6.4
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: P997621

CATALOG NUMBER: SA2XXDP-B485DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5
2.5°	920.5	924.1	923.4	916.2	908.3	901.9	889.7	891.2	886.9	887.6	891.9
5°	897.6	897.6	894.8	884.7	871.9	864.7	851.1	847.5	839.0	838.3	837.5
7.5°	873.3	869.7	866.1	851.8	836.1	824.7	806.1	801.8	793.2	787.5	784.6
10°	844.7	839.7	832.5	816.1	796.8	782.5	763.2	757.4	741.0	733.8	729.5
12.5°	813.2	810.4	798.9	785.3	753.9	738.1	710.2	715.9	699.5	685.2	683.0
15°	781.7	771.0	764.6	742.4	704.5	697.3	675.2	663.7	648.7	637.3	637.3
17.5°	751.0	734.5	720.2	696.6	668.7	648.7	632.3	626.5	607.9	596.5	594.4
20°	710.2	691.6	688.1	654.4	635.1	613.0	597.2	582.9	569.3	564.3	560.7
22.5°	671.6	650.1	644.4	615.8	596.5	574.3	558.6	548.6	538.6	535.0	528.6
25°	630.1	617.2	608.7	577.9	556.4	535.7	525.0	517.8	508.5	507.8	503.5
27.5°	590.1	577.9	569.3	540.0	524.3	505.0	496.4	488.5	483.5	481.4	479.2
30°	555.7	542.1	532.1	510.7	491.4	475.6	468.5	463.5	460.6	457.0	456.3
32.5°	517.8	510.0	496.4	479.9	464.9	449.9	445.6	442.0	437.7	436.3	435.6
35°	485.6	474.9	466.3	447.7	441.3	428.4	423.4	420.6	414.8	413.4	412.0
37.5°	454.2	444.2	434.9	423.4	411.3	404.1	401.2	397.0	394.1	394.8	393.4
40°	422.7	414.8	407.7	395.5	388.4	384.8	379.1	374.8	373.4	374.1	373.4
42.5°	391.9	384.8	380.5	371.2	364.1	360.5	356.9	352.6	354.8	354.8	356.9
45°	364.1	357.6	354.8	347.6	343.3	337.6	334.0	333.3	336.2	335.4	335.4
47.5°	335.4	333.3	329.7	323.3	317.6	314.0	313.3	313.3	316.1	317.6	316.8
50°	313.3	309.0	304.7	299.7	295.4	294.0	291.8	293.2	296.1	296.1	297.5
52.5°	285.4	282.5	281.1	276.8	273.9	273.9	273.9	274.6	276.8	278.9	278.2
55°	261.1	258.9	257.5	255.3	251.8	252.5	251.8	253.2	255.3	257.5	258.9
57.5°	235.3	234.6	233.2	229.6	229.6	228.9	231.0	231.7	235.3	236.7	238.9
60°	212.4	210.3	210.3	207.4	207.4	207.4	209.6	211.7	214.6	215.3	216.7
62.5°	188.1	188.1	187.4	185.2	185.2	187.4	188.1	191.0	192.4	192.4	194.5
65°	165.2	164.5	163.8	164.5	165.2	165.2	167.4	168.8	170.2	170.9	171.7
67.5°	142.3	141.6	143.0	142.3	143.8	146.6	145.9	148.1	150.2	150.2	150.9
70°	120.9	122.3	121.6	123.0	122.3	123.7	125.9	126.6	126.6	127.3	129.5
72.5°	100.8	100.8	100.8	100.1	100.8	102.3	103.7	104.4	105.9	106.6	108.7
75°	81.5	81.5	80.1	81.5	81.5	83.0	84.4	84.4	84.4	85.8	88.0
77.5°	61.5	62.2	61.5	62.9	62.9	63.7	65.1	64.4	65.8	66.5	67.2
80°	45.1	44.3	44.3	44.3	45.1	45.1	46.5	47.2	47.2	49.4	47.9
82.5°	28.6	29.3	28.6	29.3	29.3	30.0	29.3	30.0	30.8	32.2	31.5
85°	16.5	15.7	15.7	16.5	15.7	15.7	16.5	15.7	16.5	15.7	16.5
87.5°	6.4	5.7	5.7	5.7	5.7	5.0	5.0	4.3	4.3	4.3	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: P997621

CATALOG NUMBER: SA2XXDP-B485DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5
2.5°	886.9	889.0	884.0	882.6	884.0	879.0	880.4	881.9	881.9	884.0	885.5
5°	835.4	832.5	827.5	826.1	824.7	826.8	825.4	827.5	828.2	833.2	834.0
7.5°	784.6	780.3	776.0	771.7	770.3	766.7	770.3	770.3	775.3	773.9	777.5
10°	724.5	723.8	718.1	715.9	713.1	707.4	715.2	713.1	716.7	723.1	724.5
12.5°	680.2	672.3	675.9	665.9	669.5	663.7	664.4	664.4	670.2	670.9	669.5
15°	638.0	631.5	622.3	618.0	615.8	613.0	622.3	623.0	618.7	628.7	625.1
17.5°	595.1	595.1	586.5	584.3	578.6	581.5	580.1	580.8	579.3	586.5	590.1
20°	557.9	554.3	551.4	552.2	545.0	543.6	542.1	543.6	548.6	553.6	555.0
22.5°	527.8	525.7	518.5	520.0	514.3	516.4	515.0	518.5	519.3	519.3	524.3
25°	499.2	496.4	497.1	494.2	492.1	492.1	489.9	492.1	494.9	496.4	497.1
27.5°	477.8	475.6	472.1	469.9	471.3	467.8	470.6	472.8	472.8	471.3	472.8
30°	452.0	453.5	453.5	446.3	449.2	447.7	449.9	451.3	451.3	452.0	450.6
32.5°	434.9	430.6	429.9	429.1	429.1	426.3	426.3	428.4	429.1	429.9	432.0
35°	412.0	412.0	408.4	410.5	407.7	408.4	407.7	408.4	409.8	407.7	409.8
37.5°	391.2	391.9	390.5	391.9	392.7	391.2	389.8	392.7	391.2	391.2	389.8
40°	373.4	372.6	373.4	373.4	373.4	374.1	372.6	372.6	372.6	371.2	369.8
42.5°	358.3	354.0	355.5	356.2	354.0	354.0	354.8	354.0	356.2	351.9	351.9
45°	336.9	335.4	336.2	336.2	337.6	335.4	336.9	337.6	335.4	334.7	333.3
47.5°	317.6	319.0	317.6	319.0	319.0	320.4	317.6	318.3	319.0	316.1	314.0
50°	298.3	298.3	300.4	299.7	300.4	299.0	299.0	298.3	299.0	297.5	295.4
52.5°	280.4	278.2	281.8	281.1	280.4	279.7	278.9	279.7	278.2	276.8	276.8
55°	258.2	258.2	260.3	261.1	261.1	259.6	258.2	258.9	258.2	257.5	256.8
57.5°	240.3	237.5	238.9	239.6	239.6	237.5	238.9	237.5	237.5	238.2	236.0
60°	217.4	217.4	216.0	218.1	218.1	216.7	216.7	217.4	216.0	215.3	214.6
62.5°	193.1	193.8	196.0	196.7	197.4	196.0	194.5	195.3	195.3	193.1	193.8
65°	172.4	173.8	176.7	175.9	174.5	175.2	173.8	174.5	172.4	173.1	170.9
67.5°	152.3	151.6	152.3	152.3	153.8	153.1	151.6	151.6	150.9	153.1	150.9
70°	130.9	130.9	130.9	130.9	131.6	132.3	130.9	129.5	130.2	128.7	128.0
72.5°	108.7	109.4	108.7	110.1	108.0	109.4	109.4	108.7	108.0	108.0	108.0
75°	88.0	89.4	87.3	88.0	87.3	88.7	88.0	88.0	86.5	85.8	86.5
77.5°	67.2	67.9	66.5	67.2	66.5	67.2	67.2	66.5	66.5	66.5	66.5
80°	47.9	48.6	47.9	47.2	46.5	47.9	46.5	47.2	47.9	47.2	48.6
82.5°	30.8	30.8	30.0	30.8	29.3	29.3	30.0	30.0	29.3	30.8	29.3
85°	15.0	15.0	16.5	15.0	14.3	14.3	14.3	15.0	14.3	15.7	15.0
87.5°	3.6	2.9	3.6	3.6	2.9	2.9	3.6	2.9	3.6	4.3	2.9
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: P997621

CATALOG NUMBER: SA2XXDP-B485DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5	930.5
2.5°	883.3	889.0	886.9	879.0	888.3	888.3	894.8	894.8	902.6	905.5	909.8
5°	833.2	837.5	841.1	837.5	844.0	854.0	859.7	864.7	875.4	879.7	886.2
7.5°	779.6	787.5	791.0	791.0	801.8	813.2	824.7	831.8	846.8	852.6	859.0
10°	727.4	736.7	743.8	743.1	761.0	768.2	782.5	798.9	813.9	822.5	831.8
12.5°	672.3	677.3	687.3	701.6	705.9	718.8	735.3	756.0	783.2	791.0	804.6
15°	626.5	640.1	648.0	654.4	664.4	676.6	694.5	714.5	741.7	758.9	773.2
17.5°	587.9	605.8	610.8	609.4	622.3	640.8	661.6	676.6	700.9	721.7	735.3
20°	556.4	563.6	572.2	575.8	585.8	605.8	625.8	643.0	663.0	679.5	695.2
22.5°	525.0	530.7	537.9	544.3	552.2	563.6	582.9	604.4	623.7	639.4	657.3
25°	499.2	502.8	509.2	514.3	522.8	530.7	544.3	567.9	590.8	600.1	615.8
27.5°	474.2	477.1	481.4	487.1	491.4	499.2	511.4	530.7	554.3	563.6	585.1
30°	452.0	454.2	458.5	461.3	463.5	472.8	482.1	497.1	515.0	527.8	543.6
32.5°	431.3	433.4	437.7	438.4	441.3	446.3	454.9	468.5	484.2	494.9	508.5
35°	408.4	409.8	414.1	415.5	417.7	422.0	428.4	438.4	452.7	460.6	472.8
37.5°	390.5	389.8	392.7	394.8	397.7	399.8	402.0	412.0	422.7	429.9	439.2
40°	371.2	369.8	370.5	373.4	374.8	377.6	377.6	387.7	394.8	400.5	407.7
42.5°	351.9	351.2	349.7	351.2	352.6	353.3	354.0	361.2	368.3	373.4	381.2
45°	332.6	331.9	330.4	331.2	331.2	332.6	334.7	337.6	342.6	346.9	351.2
47.5°	314.7	313.3	311.1	310.4	311.8	311.8	311.8	314.7	319.7	321.1	325.4
50°	296.1	294.0	291.1	289.7	289.7	289.0	290.4	291.1	295.4	296.8	300.4
52.5°	276.1	274.6	271.8	268.9	269.6	268.2	268.9	269.6	271.1	273.2	275.4
55°	256.1	253.2	251.0	250.3	248.2	248.2	246.0	248.9	248.2	248.9	251.8
57.5°	236.7	233.9	230.3	228.9	226.7	226.0	224.6	223.9	224.6	226.7	228.9
60°	213.9	212.4	210.3	208.1	206.7	204.6	203.1	203.1	202.4	202.4	203.1
62.5°	191.7	191.0	188.1	187.4	186.0	184.5	182.4	181.0	181.0	182.4	183.1
65°	170.2	169.5	167.4	166.6	163.1	161.6	160.9	160.2	158.8	158.8	158.8
67.5°	150.2	148.1	148.1	144.5	141.6	140.2	138.8	138.0	138.0	138.0	138.8
70°	128.0	128.0	125.9	123.7	120.9	121.6	119.4	117.3	117.3	115.9	116.6
72.5°	106.6	105.9	103.7	103.0	100.8	98.7	97.3	98.7	96.6	95.8	96.6
75°	85.8	85.1	83.7	82.3	83.0	80.8	78.7	78.0	78.0	76.5	76.5
77.5°	65.8	67.2	64.4	63.7	62.2	60.8	60.1	59.4	59.4	59.4	60.8
80°	45.8	46.5	46.5	45.1	45.8	43.6	43.6	43.6	41.5	42.2	42.9
82.5°	29.3	29.3	28.6	29.3	28.6	28.6	27.9	27.9	27.2	27.2	27.9
85°	16.5	15.7	15.0	16.5	15.7	15.7	15.0	15.0	15.0	15.0	15.0
87.5°	3.6	4.3	4.3	4.3	4.3	5.0	5.0	5.0	5.7	5.7	5.7
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: P997621

CATALOG NUMBER: SA2XXDP-B485DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	930.5	930.5	930.5	930.5
2.5°	913.3	913.3	924.1	935.5
5°	893.3	898.3	915.5	931.2
7.5°	874.0	882.6	904.1	924.1
10°	850.4	861.9	888.3	911.9
12.5°	827.5	838.3	869.0	895.5
15°	795.3	808.9	841.8	874.7
17.5°	763.2	776.7	816.8	855.4
20°	725.2	743.1	788.2	839.7
22.5°	690.2	712.4	762.4	803.9
25°	651.6	685.9	732.4	786.0
27.5°	617.2	651.6	698.8	753.1
30°	578.6	613.7	662.3	712.4
32.5°	541.4	573.6	620.8	682.3
35°	502.8	533.6	579.3	641.6
37.5°	467.8	497.8	547.9	605.1
40°	433.4	464.9	507.8	565.0
42.5°	401.2	429.1	467.8	525.0
45°	371.9	391.9	427.7	481.4
47.5°	341.2	359.0	391.9	445.6
50°	312.6	327.6	356.2	406.3
52.5°	284.7	297.5	324.0	364.1
55°	259.6	271.8	291.1	330.4
57.5°	233.9	243.2	261.8	293.2
60°	208.8	217.4	232.4	258.2
62.5°	183.8	191.0	205.3	226.0
65°	161.6	167.4	178.1	196.0
67.5°	140.2	143.8	152.3	166.6
70°	119.4	122.3	129.5	140.9
72.5°	97.3	100.1	108.0	115.9
75°	78.7	79.4	85.1	91.5
77.5°	61.5	60.8	65.1	70.1
80°	42.2	44.3	47.9	50.1
82.5°	28.6	29.3	30.8	32.2
85°	15.7	16.5	16.5	18.6
87.5°	6.4	7.2	7.2	7.9
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P997621

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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	21.32	22.83	21.68	23.15	23.46	17.58	19.10	17.95	19.41	19.73
	3H	22.43	23.79	22.81	24.12	24.48	19.00	20.36	19.38	20.69	21.05
	4H	22.76	24.03	23.16	24.38	24.76	19.50	20.78	19.90	21.13	21.51
	6H	22.95	24.13	23.36	24.49	24.88	19.86	21.04	20.27	21.41	21.80
	8H	22.99	24.11	23.41	24.50	24.90	19.97	21.10	20.40	21.49	21.89
	12H	23.00	24.07	23.43	24.46	24.89	20.05	21.12	20.48	21.51	21.93
4H	2H	21.44	22.71	21.84	23.06	23.44	18.38	19.66	18.78	20.01	20.39
	3H	22.77	23.83	23.18	24.23	24.63	19.96	21.02	20.37	21.42	21.82
	4H	23.24	24.19	23.67	24.61	25.05	20.56	21.51	20.99	21.93	22.37
	6H	23.57	24.40	24.03	24.84	25.30	21.01	21.84	21.47	22.28	22.74
	8H	23.65	24.42	24.11	24.87	25.33	21.15	21.93	21.62	22.37	22.84
	12H	23.69	24.38	24.17	24.86	25.33	21.26	21.95	21.74	22.43	22.90
8H	4H	23.32	24.10	23.79	24.54	25.01	20.97	21.74	21.43	22.18	22.65
	6H	23.73	24.37	24.23	24.86	25.34	21.51	22.15	22.00	22.64	23.12
	8H	23.86	24.43	24.37	24.94	25.43	21.71	22.28	22.22	22.79	23.28
	12H	23.95	24.46	24.46	24.95	25.51	21.87	22.38	22.38	22.87	23.43
12H	4H	23.32	24.01	23.80	24.49	24.96	21.02	21.71	21.50	22.19	22.66
	6H	23.73	24.30	24.24	24.81	25.30	21.58	22.16	22.10	22.67	23.16
	8H	23.89	24.40	24.40	24.89	25.46	21.83	22.34	22.34	22.83	23.40