

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: P997599

Luminaire Tested: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997599
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-B485DB2750-4F0-XX-W2A-A_3500K
Description: Define 2 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

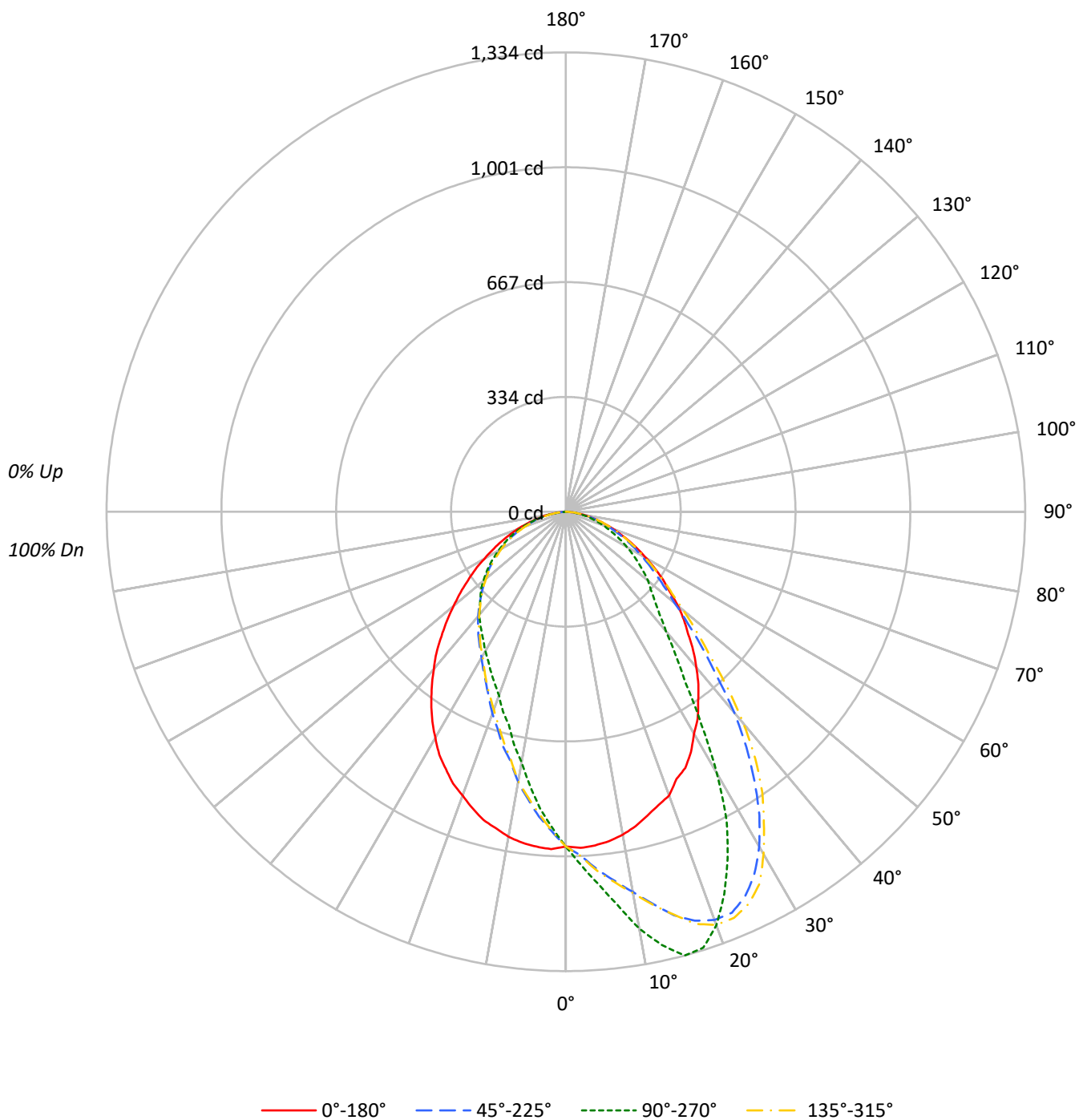
Lumens per Lamp: N/A
Luminaire Lumens: 2144.0 lumens
Efficiency: N/A
Efficacy: 89.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.09 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P997599

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P997599

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79		85	81	78		82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66	62	58	55
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46		57	51	46		55	50	45	43
7	69	56	48	42	67	55	47	42	54	46	41		52	46	41		51	45	41	39
8	64	51	43	38	63	51	43	38	49	42	37		48	42	37		47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34		45	38	34		44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31		41	35	31		41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15383	15383	15383	15383
5°	15453	17245	15512	13721
10°	15307	19762	15403	11873
15°	14970	21861	15178	10490
20°	14772	21528	14772	9563
25°	14338	19411	14402	8976
30°	13597	16041	13857	8547
35°	12947	11691	13164	8242
40°	12194	9338	12332	8071
45°	11253	8160	11437	7842
50°	10449	7671	10466	7688
55°	9524	7070	9585	7482
60°	8535	6481	8655	7164
65°	7667	5903	7806	6854
70°	6808	5359	6984	6396
75°	5847	4752	6073	5663
80°	4768	4084	5105	4558
85°	3523	3669	3796	2706

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 155°

Vertical Angle: 45°

Luminance: 20082 cd/sqm

TEST NUMBER: P997599

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.6	4.3
10°-20°	269.4	12.6
20°-30°	391.0	18.2
30°-40°	412.2	19.2
40°-50°	364.7	17.0
50°-60°	291.2	13.6
60°-70°	197.8	9.2
70°-80°	101.2	4.7
80°-90°	23.9	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°	752.9	35.1
0°-40°	1165.1	54.3
0°-60°	1821.1	84.9
0°-90°	2144.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2144.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	972	972	972	972	972	
5°	972	1085	976	864	972	92
15°	914	1334	926	640	914	258
25°	821	1111	825	514	821	375
35°	670	605	681	426	670	419
45°	503	364	511	350	503	390
55°	345	256	347	271	345	308
65°	205	158	208	183	205	203
75°	96	78	99	93	96	103
85°	19	20	21	15	19	24
90°	0	0	0	0	0	

TEST NUMBER: P997599

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8
2.5°	977.0	979.2	983.0	983.7	991.2	997.2	1003.9	1003.9	1006.1	1005.4	999.4
5°	972.5	979.2	988.9	997.2	1010.6	1016.6	1025.5	1032.3	1038.2	1042.7	1042.0
7.5°	965.0	977.0	991.2	1006.9	1024.8	1035.3	1047.9	1059.9	1068.1	1075.6	1080.8
10°	952.3	972.5	991.9	1012.8	1036.0	1050.2	1065.1	1080.8	1093.5	1107.7	1121.1
12.5°	935.2	964.3	988.2	1015.8	1044.2	1059.9	1083.8	1095.8	1120.4	1156.3	1166.0
15°	913.5	953.1	975.5	1010.6	1047.9	1060.6	1093.5	1112.9	1163.7	1186.1	1213.0
17.5°	893.3	937.4	967.3	1007.6	1044.2	1068.9	1101.0	1140.6	1183.1	1215.3	1245.1
20°	876.9	919.5	955.3	1000.1	1046.5	1077.8	1111.4	1159.2	1205.6	1238.4	1261.6
22.5°	839.6	894.1	935.9	986.0	1042.0	1085.3	1117.4	1169.7	1219.7	1239.9	1260.1
25°	820.9	867.9	916.5	973.3	1039.0	1090.5	1118.2	1176.4	1220.5	1228.0	1232.4
27.5°	786.5	839.6	896.3	961.3	1038.2	1081.6	1116.7	1169.7	1204.8	1199.6	1186.1
30°	743.9	808.9	871.7	941.9	1027.8	1074.8	1107.7	1156.3	1174.2	1147.3	1123.4
32.5°	712.6	773.8	843.3	924.7	1015.8	1060.6	1092.8	1130.9	1134.6	1086.0	1045.7
35°	670.0	738.0	816.4	902.3	995.7	1036.0	1065.9	1089.0	1071.1	1003.1	955.3
37.5°	631.9	699.1	782.8	870.2	968.0	1007.6	1031.5	1035.3	991.2	931.4	861.2
40°	590.1	659.5	746.9	838.8	937.4	971.8	986.7	975.5	912.0	842.5	761.1
42.5°	548.2	617.0	711.1	805.2	898.6	927.7	933.7	903.0	825.4	743.9	649.8
45°	502.7	574.4	668.5	763.4	853.7	870.2	870.9	826.9	735.0	649.8	562.4
47.5°	465.3	531.8	625.2	720.0	796.2	807.4	803.0	752.2	652.1	556.5	480.3
50°	424.3	487.7	580.4	673.7	738.7	741.7	730.5	658.0	560.2	472.8	412.3
52.5°	380.2	444.4	529.6	619.2	677.5	673.0	651.3	573.6	481.8	409.3	363.0
55°	345.1	401.9	481.8	569.2	610.2	597.5	573.6	494.5	422.0	360.8	320.4
57.5°	306.2	356.3	434.7	510.9	534.8	522.9	499.0	425.0	357.8	311.5	284.6
60°	269.6	315.2	383.9	447.4	466.1	453.4	425.8	359.3	310.7	271.9	251.7
62.5°	236.0	275.6	333.1	391.4	398.9	386.2	362.3	308.5	266.7	236.0	221.1
65°	204.7	242.0	288.3	332.4	339.1	325.7	301.0	262.2	227.1	207.6	193.5
67.5°	174.0	203.9	245.0	277.1	280.8	268.1	248.0	216.6	194.9	174.0	163.6
70°	147.1	169.6	201.7	227.8	229.3	217.4	206.9	178.5	162.1	147.1	138.9
72.5°	121.0	136.7	161.3	180.8	181.5	174.0	164.3	146.4	132.2	121.8	113.5
75°	95.6	109.1	124.0	141.2	140.4	134.4	127.0	115.8	103.8	97.1	93.4
77.5°	73.2	81.4	93.4	104.6	104.6	101.6	97.1	88.9	81.4	74.7	71.0
80°	52.3	57.5	67.2	71.0	72.5	71.7	68.0	62.0	59.0	53.8	52.3
82.5°	33.6	37.3	41.8	45.6	47.8	46.3	45.6	42.6	38.1	36.6	35.1
85°	19.4	20.9	23.2	25.4	26.1	25.4	26.9	24.6	22.4	22.4	21.7
87.5°	8.2	9.0	10.5	10.5	11.2	11.2	10.5	11.2	11.2	10.5	9.7
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: P997599

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8
2.5°	1009.9	1010.6	1012.1	1019.6	1023.3	1024.0	1021.1	1027.8	1030.0	1027.8	1026.3
5°	1057.7	1062.1	1071.1	1080.8	1080.1	1080.8	1085.3	1089.8	1091.3	1085.3	1087.5
7.5°	1099.5	1108.4	1118.2	1133.1	1133.1	1140.6	1143.6	1147.3	1156.3	1151.8	1150.3
10°	1147.3	1159.2	1177.2	1201.1	1201.8	1209.3	1216.8	1228.7	1232.4	1229.5	1230.9
12.5°	1207.0	1230.2	1231.7	1257.8	1269.8	1271.3	1283.2	1281.0	1288.5	1288.5	1301.2
15°	1233.2	1269.0	1289.2	1314.6	1322.1	1313.1	1322.8	1333.3	1334.0	1334.0	1333.3
17.5°	1280.2	1294.4	1314.6	1328.0	1331.0	1331.0	1331.8	1336.3	1333.3	1327.3	1331.8
20°	1290.0	1295.9	1303.4	1301.9	1303.4	1295.9	1288.5	1281.0	1281.7	1278.0	1289.2
22.5°	1272.0	1270.5	1253.4	1242.2	1242.2	1227.2	1213.0	1206.3	1199.6	1201.8	1205.6
25°	1227.2	1204.1	1183.1	1166.7	1163.0	1139.1	1119.7	1113.7	1102.5	1111.4	1112.9
27.5°	1155.5	1129.4	1095.8	1081.6	1062.1	1052.4	1039.0	1021.1	997.9	1011.3	1009.1
30°	1078.6	1039.7	1012.1	977.7	947.1	944.9	919.5	889.6	877.6	877.6	884.4
32.5°	992.7	941.1	900.8	852.3	822.4	809.7	779.1	749.2	755.9	733.5	741.7
35°	892.6	824.6	773.8	726.8	704.4	689.4	649.8	633.4	615.5	605.0	624.4
37.5°	797.0	718.6	653.6	602.0	593.8	566.9	540.0	529.6	519.1	523.6	522.9
40°	680.5	611.0	552.7	512.4	498.2	485.5	467.6	454.9	448.2	451.9	452.6
42.5°	575.1	516.9	473.6	445.2	433.2	424.3	415.3	404.8	402.6	402.6	405.6
45°	493.7	445.9	416.8	393.6	386.9	380.2	373.5	369.0	367.5	364.5	366.7
47.5°	428.7	390.6	372.7	355.5	348.1	346.6	340.6	338.4	335.4	334.6	335.4
50°	374.2	350.3	333.9	324.2	318.9	316.7	313.7	309.2	307.7	311.5	310.0
52.5°	336.1	313.7	304.7	295.0	292.1	289.1	284.6	285.3	284.6	283.1	283.1
55°	298.0	283.8	274.9	267.4	266.7	263.7	259.9	258.4	257.7	256.2	258.4
57.5°	267.4	256.2	248.0	241.3	238.3	238.3	234.5	231.5	231.5	230.8	231.5
60°	236.8	225.6	220.3	213.6	211.4	210.6	208.4	206.9	204.7	204.7	204.7
62.5°	208.4	199.4	193.5	187.5	188.2	184.5	181.5	180.0	180.0	180.8	180.8
65°	181.5	175.5	168.1	162.8	161.3	160.6	159.1	158.3	156.1	157.6	157.6
67.5°	156.9	148.6	144.2	141.9	139.7	138.9	137.4	135.9	135.2	134.4	135.9
70°	132.2	125.5	121.8	120.3	118.0	117.3	116.5	114.3	115.0	115.8	116.5
72.5°	109.8	103.8	103.1	98.6	98.6	98.6	95.6	97.1	96.4	94.9	96.4
75°	86.6	83.7	82.2	79.9	80.7	79.9	79.2	76.9	76.9	77.7	78.4
77.5°	68.7	65.7	65.0	62.7	61.2	62.7	61.2	60.5	60.5	61.2	61.2
80°	50.8	49.3	47.1	47.1	47.1	46.3	46.3	46.3	45.6	44.8	45.6
82.5°	33.6	33.6	32.9	32.1	32.9	31.4	32.1	32.1	32.1	32.1	32.1
85°	21.7	20.9	20.9	20.2	20.2	20.2	20.9	19.4	19.4	20.2	20.2
87.5°	9.7	9.7	9.7	10.5	9.7	9.7	9.7	10.5	9.7	9.7	9.7
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: P997599

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8
2.5°	1030.0	1024.8	1020.3	1021.1	1024.8	1021.8	1014.3	1004.6	1000.9	996.4	1000.9
5°	1092.0	1087.5	1078.6	1079.3	1077.1	1074.1	1062.1	1047.2	1047.2	1035.3	1033.8
7.5°	1153.3	1146.5	1140.6	1139.1	1130.9	1124.9	1114.4	1093.5	1085.3	1071.1	1062.9
10°	1222.0	1216.8	1210.0	1201.8	1197.3	1186.9	1169.7	1139.1	1124.1	1104.7	1090.5
12.5°	1291.4	1290.7	1275.8	1259.3	1258.6	1242.2	1230.2	1189.1	1169.0	1142.8	1109.2
15°	1335.5	1331.8	1323.6	1315.4	1317.6	1299.7	1272.8	1224.2	1210.8	1179.4	1143.6
17.5°	1334.8	1334.8	1332.5	1331.0	1328.8	1323.6	1308.6	1276.5	1254.8	1215.3	1181.6
20°	1292.2	1301.9	1304.1	1303.4	1310.9	1314.6	1313.9	1293.7	1276.5	1241.4	1207.0
22.5°	1207.0	1229.5	1239.2	1245.1	1260.8	1269.0	1288.5	1281.0	1276.5	1250.4	1221.2
25°	1127.9	1135.3	1164.5	1166.0	1187.6	1207.8	1227.2	1239.9	1256.3	1246.6	1222.0
27.5°	1025.5	1042.7	1063.6	1079.3	1083.8	1124.9	1157.0	1180.9	1218.2	1221.2	1213.0
30°	909.8	918.0	952.3	973.3	997.2	1027.0	1073.3	1114.4	1148.0	1178.7	1189.1
32.5°	768.6	802.2	822.4	847.8	868.7	921.7	978.5	1031.5	1070.4	1121.9	1144.3
35°	639.4	665.5	699.9	710.3	748.4	793.2	867.2	935.2	994.2	1046.5	1092.0
37.5°	532.6	553.5	590.1	606.5	628.9	686.4	748.4	832.8	903.8	968.0	1024.8
40°	459.4	475.0	502.7	507.9	526.6	578.9	628.9	708.1	802.2	888.9	950.8
42.5°	409.3	416.8	435.5	442.2	454.1	489.2	534.1	608.8	696.1	785.8	873.2
45°	373.5	378.7	389.9	395.9	410.8	426.5	463.1	522.9	591.6	682.0	776.1
47.5°	341.3	348.1	352.6	356.3	364.5	381.7	405.6	449.7	515.4	598.3	689.4
50°	314.5	316.7	324.9	325.7	330.9	342.1	364.5	391.4	443.7	510.9	599.0
52.5°	287.6	289.8	295.0	300.3	302.5	311.5	326.4	348.8	387.7	440.7	519.1
55°	260.7	263.7	268.9	272.6	274.9	282.3	291.3	313.0	343.6	380.9	445.2
57.5°	233.8	240.5	242.0	244.2	248.0	256.2	264.4	277.1	301.0	335.4	382.4
60°	208.4	210.6	215.9	218.1	221.8	226.3	236.8	246.5	263.7	290.6	333.1
62.5°	182.3	187.5	189.7	192.0	194.9	200.2	206.9	217.4	232.3	254.0	287.6
65°	159.8	160.6	165.1	168.1	171.0	174.8	181.5	191.2	200.2	220.3	245.0
67.5°	138.2	139.7	141.2	144.2	147.9	151.6	157.6	162.8	174.0	187.5	206.9
70°	117.3	117.3	121.0	123.2	122.5	127.0	131.5	137.4	145.7	158.3	174.0
72.5°	98.6	97.8	100.8	101.6	103.1	106.1	109.1	115.0	119.5	129.2	141.2
75°	78.4	79.9	81.4	81.4	83.7	85.9	88.9	91.9	97.1	103.1	112.0
77.5°	62.0	62.0	63.5	64.2	66.5	65.7	68.7	71.7	75.4	80.7	87.4
80°	45.6	47.1	47.1	47.1	47.8	48.6	51.5	53.8	56.0	59.8	62.7
82.5°	32.1	32.1	33.6	33.6	33.6	35.1	35.1	35.9	37.3	39.6	41.8
85°	20.2	20.2	20.2	20.9	20.2	20.9	22.4	21.7	22.4	23.9	23.9
87.5°	9.7	9.7	9.7	9.7	9.7	10.5	9.7	10.5	11.2	11.2	11.2
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: P997599

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8
2.5°	997.2	993.4	991.2	992.7	988.2	977.0	977.0	980.7	976.2	971.8	965.0
5°	1024.8	1017.3	1012.8	1012.1	1001.6	983.7	980.0	976.2	966.5	956.1	944.9
7.5°	1051.7	1038.2	1030.8	1025.5	1010.6	987.4	977.7	969.5	953.8	938.1	924.0
10°	1074.1	1054.7	1045.7	1037.5	1018.1	988.9	973.3	958.3	938.1	918.0	900.1
12.5°	1092.0	1069.6	1058.4	1046.5	1022.6	984.5	965.0	941.1	921.0	894.1	876.2
15°	1121.9	1075.6	1065.1	1053.9	1029.3	977.0	953.1	926.2	898.6	862.7	843.3
17.5°	1145.8	1083.8	1083.1	1059.2	1027.0	974.0	937.4	902.3	872.4	836.6	805.9
20°	1160.0	1096.5	1084.5	1059.9	1019.6	953.8	915.7	876.9	844.8	801.5	770.8
22.5°	1171.9	1114.4	1083.1	1053.2	1003.9	947.1	891.1	854.5	810.4	763.4	734.2
25°	1176.4	1118.2	1085.3	1050.9	992.7	927.7	864.2	824.6	775.3	732.7	693.2
27.5°	1177.2	1117.4	1077.1	1041.2	977.0	902.3	837.3	795.5	741.0	691.7	652.1
30°	1169.7	1109.2	1072.6	1033.8	962.1	879.1	804.4	758.1	699.9	650.6	609.5
32.5°	1147.3	1092.8	1062.9	1020.3	942.6	847.0	773.1	721.5	660.3	611.7	572.2
35°	1109.9	1072.6	1039.7	1000.1	917.2	817.1	741.7	681.2	619.2	572.9	535.6
37.5°	1063.6	1043.5	1012.8	974.0	888.1	790.3	706.6	639.4	577.4	532.6	496.0
40°	1000.9	1006.1	976.2	941.1	853.7	753.7	661.0	596.8	538.5	496.7	460.9
42.5°	932.9	954.6	937.4	903.8	815.7	713.3	627.4	556.5	499.7	456.4	426.5
45°	859.7	897.1	886.6	862.0	776.1	670.7	579.6	510.9	460.9	419.0	392.9
47.5°	779.8	832.8	832.8	814.9	732.0	628.2	538.5	468.3	419.0	389.2	363.8
50°	698.4	758.1	767.8	755.9	682.7	579.6	488.5	425.0	382.4	353.3	334.6
52.5°	613.2	682.7	700.6	694.6	630.4	533.3	447.4	385.4	346.6	321.2	304.7
55°	531.8	612.5	631.9	634.1	574.4	482.5	401.9	347.3	310.0	292.8	278.6
57.5°	454.9	532.6	554.2	558.0	517.6	436.2	359.3	311.5	277.9	263.7	252.5
60°	389.2	454.1	482.5	490.7	455.6	382.4	319.7	273.4	248.0	234.5	224.1
62.5°	335.4	387.7	417.5	419.8	404.1	335.4	278.6	239.8	218.1	206.2	200.9
65°	283.1	330.1	348.1	357.0	344.3	290.6	240.5	208.4	191.2	180.8	175.5
67.5°	241.3	271.1	286.1	298.0	285.3	245.0	204.7	178.5	165.8	155.4	152.4
70°	197.9	222.6	233.8	245.7	234.5	203.9	174.8	150.9	139.7	131.5	127.7
72.5°	158.3	177.8	188.2	195.7	189.0	163.6	139.7	123.2	115.0	109.1	106.8
75°	125.5	138.9	144.9	150.1	147.1	127.7	112.8	99.3	91.9	86.6	85.2
77.5°	95.6	105.3	112.0	113.5	109.8	97.1	84.4	76.2	70.2	67.2	65.7
80°	68.0	73.9	77.7	79.9	76.2	71.0	62.0	56.0	50.8	47.1	46.3
82.5°	45.6	48.6	51.5	50.8	49.3	44.8	39.6	36.6	34.4	31.4	31.4
85°	26.1	26.9	28.4	29.1	28.4	25.4	22.4	20.9	19.4	17.2	17.2
87.5°	11.2	12.0	12.0	12.7	11.2	11.2	9.7	8.2	8.2	7.5	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: P997599

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8
2.5°	961.3	965.0	964.3	956.8	948.6	941.9	929.2	930.7	926.2	926.9	931.4
5°	937.4	937.4	934.4	924.0	910.5	903.0	888.9	885.1	876.2	875.4	874.7
7.5°	912.0	908.3	904.5	889.6	873.2	861.2	841.8	837.3	828.3	822.4	819.4
10°	882.1	876.9	869.4	852.3	832.1	817.1	797.0	791.0	773.8	766.4	761.9
12.5°	849.3	846.3	834.3	820.1	787.3	770.8	741.7	747.7	730.5	715.6	713.3
15°	816.4	805.2	798.5	775.3	735.7	728.3	705.1	693.2	677.5	665.5	665.5
17.5°	784.3	767.1	752.2	727.5	698.4	677.5	660.3	654.3	634.9	622.9	620.7
20°	741.7	722.3	718.6	683.4	663.3	640.1	623.7	608.8	594.6	589.3	585.6
22.5°	701.4	679.0	673.0	643.1	622.9	599.8	583.4	572.9	562.4	558.7	552.0
25°	658.0	644.6	635.6	603.5	581.1	559.5	548.2	540.8	531.1	530.3	525.8
27.5°	616.2	603.5	594.6	563.9	547.5	527.3	518.4	510.2	504.9	502.7	500.4
30°	580.4	566.2	555.7	533.3	513.1	496.7	489.2	484.0	481.0	477.3	476.5
32.5°	540.8	532.6	518.4	501.2	485.5	469.8	465.3	461.6	457.1	455.6	454.9
35°	507.2	496.0	487.0	467.6	460.9	447.4	442.2	439.2	433.2	431.7	430.2
37.5°	474.3	463.8	454.1	442.2	429.5	422.0	419.0	414.5	411.6	412.3	410.8
40°	441.4	433.2	425.8	413.1	405.6	401.9	395.9	391.4	389.9	390.6	389.9
42.5°	409.3	401.9	397.4	387.7	380.2	376.5	372.7	368.2	370.5	370.5	372.7
45°	380.2	373.5	370.5	363.0	358.5	352.6	348.8	348.1	351.1	350.3	350.3
47.5°	350.3	348.1	344.3	337.6	331.6	327.9	327.2	327.2	330.1	331.6	330.9
50°	327.2	322.7	318.2	313.0	308.5	307.0	304.7	306.2	309.2	309.2	310.7
52.5°	298.0	295.0	293.5	289.1	286.1	286.1	286.1	286.8	289.1	291.3	290.6
55°	272.6	270.4	268.9	266.7	262.9	263.7	262.9	264.4	266.7	268.9	270.4
57.5°	245.7	245.0	243.5	239.8	239.8	239.0	241.3	242.0	245.7	247.2	249.5
60°	221.8	219.6	219.6	216.6	216.6	216.6	218.9	221.1	224.1	224.8	226.3
62.5°	196.4	196.4	195.7	193.5	193.5	195.7	196.4	199.4	200.9	200.9	203.2
65°	172.5	171.8	171.0	171.8	172.5	172.5	174.8	176.3	177.8	178.5	179.3
67.5°	148.6	147.9	149.4	148.6	150.1	153.1	152.4	154.6	156.9	156.9	157.6
70°	126.2	127.7	127.0	128.5	127.7	129.2	131.5	132.2	132.2	133.0	135.2
72.5°	105.3	105.3	105.3	104.6	105.3	106.8	108.3	109.1	110.5	111.3	113.5
75°	85.2	85.2	83.7	85.2	85.2	86.6	88.1	88.1	88.1	89.6	91.9
77.5°	64.2	65.0	64.2	65.7	65.7	66.5	68.0	67.2	68.7	69.5	70.2
80°	47.1	46.3	46.3	46.3	47.1	47.1	48.6	49.3	49.3	51.5	50.0
82.5°	29.9	30.6	29.9	30.6	30.6	31.4	30.6	31.4	32.1	33.6	32.9
85°	17.2	16.4	16.4	17.2	16.4	16.4	17.2	16.4	17.2	16.4	17.2
87.5°	6.7	6.0	6.0	6.0	6.0	5.2	5.2	4.5	4.5	4.5	3.7
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: P997599

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8
2.5°	926.2	928.4	923.2	921.7	923.2	918.0	919.5	921.0	921.0	923.2	924.7
5°	872.4	869.4	864.2	862.7	861.2	863.5	862.0	864.2	864.9	870.2	870.9
7.5°	819.4	814.9	810.4	805.9	804.4	800.7	804.4	804.4	809.7	808.2	811.9
10°	756.6	755.9	749.9	747.7	744.7	738.7	746.9	744.7	748.4	755.1	756.6
12.5°	710.3	702.1	705.9	695.4	699.1	693.2	693.9	693.9	699.9	700.6	699.1
15°	666.3	659.5	649.8	645.4	643.1	640.1	649.8	650.6	646.1	656.6	652.8
17.5°	621.4	621.4	612.5	610.2	604.3	607.3	605.8	606.5	605.0	612.5	616.2
20°	582.6	578.9	575.9	576.6	569.2	567.7	566.2	567.7	572.9	578.1	579.6
22.5°	551.2	549.0	541.5	543.0	537.0	539.3	537.8	541.5	542.3	542.3	547.5
25°	521.4	518.4	519.1	516.1	513.9	513.9	511.6	513.9	516.9	518.4	519.1
27.5°	499.0	496.7	493.0	490.7	492.2	488.5	491.5	493.7	493.7	492.2	493.7
30°	472.1	473.6	473.6	466.1	469.1	467.6	469.8	471.3	471.3	472.1	470.6
32.5°	454.1	449.7	448.9	448.2	448.2	445.2	445.2	447.4	448.2	448.9	451.1
35°	430.2	430.2	426.5	428.7	425.8	426.5	425.8	426.5	428.0	425.8	428.0
37.5°	408.6	409.3	407.8	409.3	410.1	408.6	407.1	410.1	408.6	408.6	407.1
40°	389.9	389.2	389.9	389.9	389.9	390.6	389.2	389.2	389.2	387.7	386.2
42.5°	374.2	369.7	371.2	372.0	369.7	369.7	370.5	369.7	372.0	367.5	367.5
45°	351.8	350.3	351.1	351.1	352.6	350.3	351.8	352.6	350.3	349.6	348.1
47.5°	331.6	333.1	331.6	333.1	333.1	334.6	331.6	332.4	333.1	330.1	327.9
50°	311.5	311.5	313.7	313.0	313.7	312.2	312.2	311.5	312.2	310.7	308.5
52.5°	292.8	290.6	294.3	293.5	292.8	292.1	291.3	292.1	290.6	289.1	289.1
55°	269.6	269.6	271.9	272.6	272.6	271.1	269.6	270.4	269.6	268.9	268.1
57.5°	251.0	248.0	249.5	250.2	250.2	248.0	249.5	248.0	248.0	248.7	246.5
60°	227.1	227.1	225.6	227.8	227.8	226.3	226.3	227.1	225.6	224.8	224.1
62.5°	201.7	202.4	204.7	205.4	206.2	204.7	203.2	203.9	203.9	201.7	202.4
65°	180.0	181.5	184.5	183.7	182.3	183.0	181.5	182.3	180.0	180.8	178.5
67.5°	159.1	158.3	159.1	159.1	160.6	159.8	158.3	158.3	157.6	159.8	157.6
70°	136.7	136.7	136.7	136.7	137.4	138.2	136.7	135.2	135.9	134.4	133.7
72.5°	113.5	114.3	113.5	115.0	112.8	114.3	114.3	113.5	112.8	112.8	112.8
75°	91.9	93.4	91.1	91.9	91.1	92.6	91.9	91.9	90.4	89.6	90.4
77.5°	70.2	71.0	69.5	70.2	69.5	70.2	70.2	69.5	69.5	69.5	69.5
80°	50.0	50.8	50.0	49.3	48.6	50.0	48.6	49.3	50.0	49.3	50.8
82.5°	32.1	32.1	31.4	32.1	30.6	30.6	31.4	31.4	30.6	32.1	30.6
85°	15.7	15.7	17.2	15.7	14.9	14.9	14.9	15.7	14.9	16.4	15.7
87.5°	3.7	3.0	3.7	3.7	3.0	3.0	3.7	3.0	3.7	4.5	3.0
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: P997599

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8
2.5°	922.5	928.4	926.2	918.0	927.7	927.7	934.4	934.4	942.6	945.6	950.1
5°	870.2	874.7	878.4	874.7	881.4	891.8	897.8	903.0	914.2	918.7	925.5
7.5°	814.2	822.4	826.1	826.1	837.3	849.3	861.2	868.7	884.4	890.3	897.1
10°	759.6	769.3	776.8	776.1	794.7	802.2	817.1	834.3	850.0	859.0	868.7
12.5°	702.1	707.3	717.8	732.7	737.2	750.7	767.8	789.5	817.9	826.1	840.3
15°	654.3	668.5	676.7	683.4	693.9	706.6	725.3	746.2	774.6	792.5	807.4
17.5°	614.0	632.7	637.9	636.4	649.8	669.3	690.9	706.6	732.0	753.7	767.8
20°	581.1	588.6	597.5	601.3	611.7	632.7	653.6	671.5	692.4	709.6	726.0
22.5°	548.2	554.2	561.7	568.4	576.6	588.6	608.8	631.2	651.3	667.8	686.4
25°	521.4	525.1	531.8	537.0	546.0	554.2	568.4	593.1	617.0	626.7	643.1
27.5°	495.2	498.2	502.7	508.7	513.1	521.4	534.1	554.2	578.9	588.6	611.0
30°	472.1	474.3	478.8	481.8	484.0	493.7	503.4	519.1	537.8	551.2	567.7
32.5°	450.4	452.6	457.1	457.9	460.9	466.1	475.0	489.2	505.7	516.9	531.1
35°	426.5	428.0	432.5	434.0	436.2	440.7	447.4	457.9	472.8	481.0	493.7
37.5°	407.8	407.1	410.1	412.3	415.3	417.5	419.8	430.2	441.4	448.9	458.6
40°	387.7	386.2	386.9	389.9	391.4	394.4	394.4	404.8	412.3	418.3	425.8
42.5°	367.5	366.7	365.3	366.7	368.2	369.0	369.7	377.2	384.7	389.9	398.1
45°	347.3	346.6	345.1	345.8	345.8	347.3	349.6	352.6	357.8	362.3	366.7
47.5°	328.7	327.2	324.9	324.2	325.7	325.7	325.7	328.7	333.9	335.4	339.9
50°	309.2	307.0	304.0	302.5	302.5	301.8	303.3	304.0	308.5	310.0	313.7
52.5°	288.3	286.8	283.8	280.8	281.6	280.1	280.8	281.6	283.1	285.3	287.6
55°	267.4	264.4	262.2	261.4	259.2	259.2	256.9	259.9	259.2	259.9	262.9
57.5°	247.2	244.2	240.5	239.0	236.8	236.0	234.5	233.8	234.5	236.8	239.0
60°	223.3	221.8	219.6	217.4	215.9	213.6	212.1	212.1	211.4	211.4	212.1
62.5°	200.2	199.4	196.4	195.7	194.2	192.7	190.5	189.0	189.0	190.5	191.2
65°	177.8	177.0	174.8	174.0	170.3	168.8	168.1	167.3	165.8	165.8	165.8
67.5°	156.9	154.6	154.6	150.9	147.9	146.4	144.9	144.2	144.2	144.2	144.9
70°	133.7	133.7	131.5	129.2	126.2	127.0	124.7	122.5	122.5	121.0	121.8
72.5°	111.3	110.5	108.3	107.6	105.3	103.1	101.6	103.1	100.8	100.1	100.8
75°	89.6	88.9	87.4	85.9	86.6	84.4	82.2	81.4	81.4	79.9	79.9
77.5°	68.7	70.2	67.2	66.5	65.0	63.5	62.7	62.0	62.0	62.0	63.5
80°	47.8	48.6	48.6	47.1	47.8	45.6	45.6	45.6	43.3	44.1	44.8
82.5°	30.6	30.6	29.9	30.6	29.9	29.9	29.1	29.1	28.4	28.4	29.1
85°	17.2	16.4	15.7	17.2	16.4	16.4	15.7	15.7	15.7	15.7	15.7
87.5°	3.7	4.5	4.5	4.5	4.5	5.2	5.2	5.2	6.0	6.0	6.0
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: P997599

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	971.8	971.8	971.8	971.8
2.5°	953.8	953.8	965.0	977.0
5°	932.9	938.1	956.1	972.5
7.5°	912.8	921.7	944.1	965.0
10°	888.1	900.1	927.7	952.3
12.5°	864.2	875.4	907.5	935.2
15°	830.6	844.8	879.1	913.5
17.5°	797.0	811.2	853.0	893.3
20°	757.4	776.1	823.1	876.9
22.5°	720.8	743.9	796.2	839.6
25°	680.5	716.3	764.9	820.9
27.5°	644.6	680.5	729.8	786.5
30°	604.3	640.9	691.7	743.9
32.5°	565.4	599.0	648.3	712.6
35°	525.1	557.2	605.0	670.0
37.5°	488.5	519.9	572.2	631.9
40°	452.6	485.5	530.3	590.1
42.5°	419.0	448.2	488.5	548.2
45°	388.4	409.3	446.7	502.7
47.5°	356.3	375.0	409.3	465.3
50°	326.4	342.1	372.0	424.3
52.5°	297.3	310.7	338.4	380.2
55°	271.1	283.8	304.0	345.1
57.5°	244.2	254.0	273.4	306.2
60°	218.1	227.1	242.8	269.6
62.5°	192.0	199.4	214.4	236.0
65°	168.8	174.8	186.0	204.7
67.5°	146.4	150.1	159.1	174.0
70°	124.7	127.7	135.2	147.1
72.5°	101.6	104.6	112.8	121.0
75°	82.2	82.9	88.9	95.6
77.5°	64.2	63.5	68.0	73.2
80°	44.1	46.3	50.0	52.3
82.5°	29.9	30.6	32.1	33.6
85°	16.4	17.2	17.2	19.4
87.5°	6.7	7.5	7.5	8.2
90°	0.0	0.0	0.0	0.0



TEST NUMBER: P997599

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3500K

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	21.47	22.98	21.83	23.30	23.61	17.73	19.25	18.10	19.56	19.88
	3H	22.58	23.94	22.96	24.27	24.63	19.15	20.51	19.53	20.84	21.20
	4H	22.91	24.18	23.31	24.53	24.91	19.65	20.93	20.05	21.28	21.66
	6H	23.10	24.28	23.51	24.64	25.03	20.01	21.19	20.42	21.56	21.95
	8H	23.14	24.26	23.56	24.65	25.05	20.12	21.25	20.55	21.64	22.04
	12H	23.15	24.22	23.58	24.61	25.04	20.20	21.27	20.63	21.66	22.08
4H	2H	21.59	22.86	21.99	23.21	23.59	18.53	19.81	18.93	20.16	20.54
	3H	22.92	23.98	23.33	24.38	24.78	20.11	21.17	20.52	21.57	21.97
	4H	23.39	24.35	23.82	24.76	25.20	20.71	21.66	21.14	22.08	22.52
	6H	23.72	24.55	24.18	24.99	25.45	21.16	21.99	21.62	22.43	22.89
	8H	23.80	24.57	24.26	25.02	25.48	21.30	22.08	21.77	22.52	22.99
	12H	23.84	24.53	24.32	25.01	25.48	21.41	22.10	21.89	22.58	23.05
8H	4H	23.48	24.25	23.94	24.69	25.16	21.12	21.89	21.58	22.34	22.80
	6H	23.88	24.52	24.38	25.01	25.49	21.66	22.30	22.16	22.79	23.27
	8H	24.01	24.58	24.53	25.09	25.58	21.86	22.43	22.37	22.94	23.43
	12H	24.10	24.61	24.61	25.10	25.66	22.02	22.53	22.53	23.02	23.59
12H	4H	23.47	24.16	23.95	24.64	25.11	21.17	21.86	21.65	22.34	22.81
	6H	23.88	24.45	24.39	24.96	25.45	21.73	22.31	22.25	22.82	23.31
	8H	24.04	24.55	24.55	25.04	25.61	21.98	22.49	22.49	22.98	23.55