

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: P997600

Luminaire Tested: SA2XXDP-B485DB2750-4F0-XX-W2A-A_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997600
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_4000K
Description: Define 2 Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

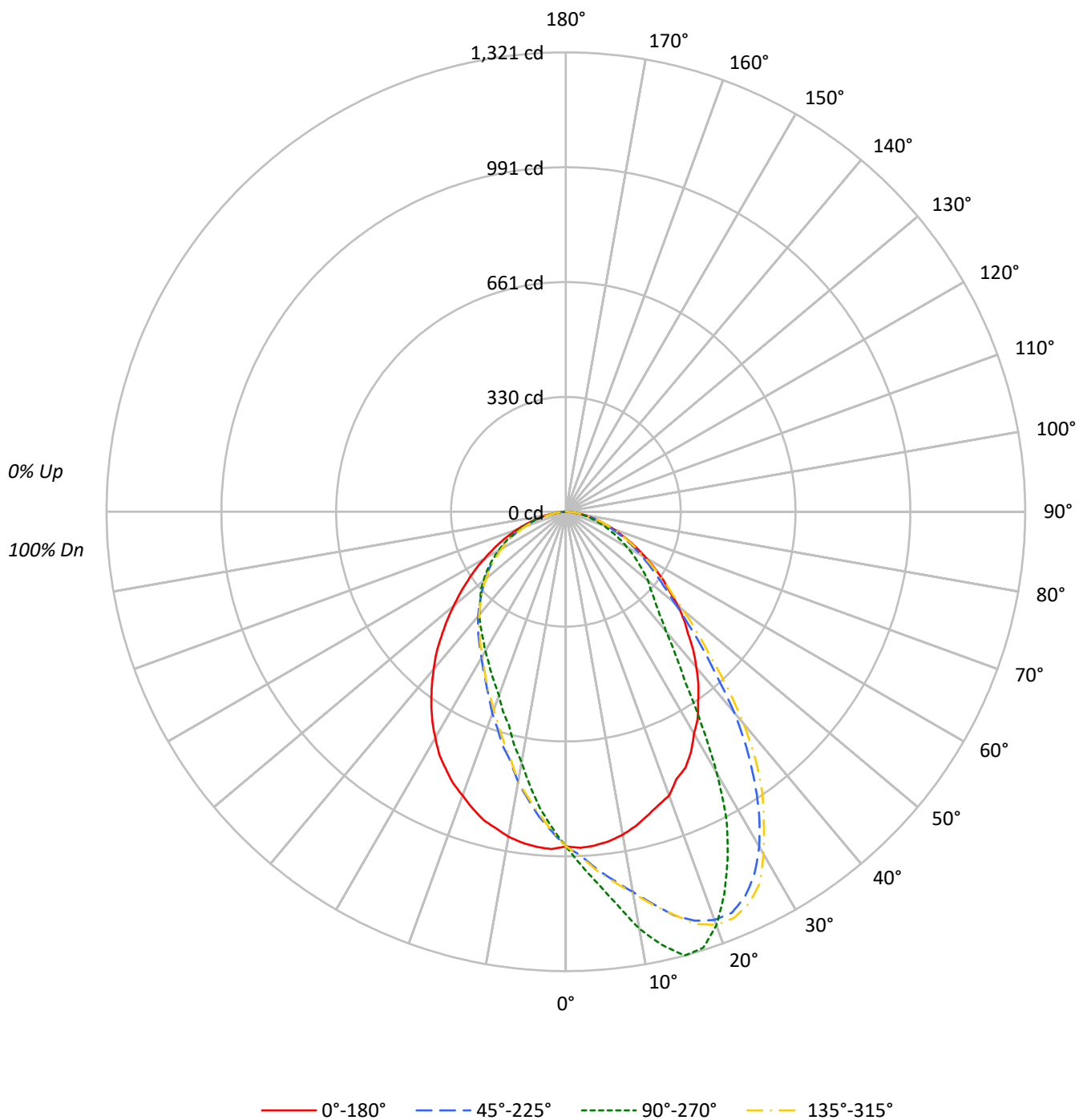
Lumens per Lamp: N/A
Luminaire Lumens: 2123.0 lumens
Efficiency: N/A
Efficacy: 88.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.09 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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				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°	15231	15231	15231	15231
5°	15302	17077	15361	13586
10°	15157	19568	15252	11758
15°	14824	21648	15029	10388
20°	14627	21318	14627	9469
25°	14196	19223	14261	8888
30°	13465	15885	13721	8463
35°	12820	11577	13034	8161
40°	12074	9247	12212	7993
45°	11144	8079	11325	7766
50°	10345	7595	10363	7614
55°	9430	7001	9491	7410
60°	8453	6417	8570	7095
65°	7592	5847	7731	6787
70°	6743	5304	6914	6331
75°	5792	4703	6018	5608
80°	4722	4047	5059	4521
85°	3487	3632	3760	2688

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 155°

Vertical Angle: 45°

Luminance: 19885 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.7	4.3
10°-20°	266.8	12.6
20°-30°	387.2	18.2
30°-40°	408.1	19.2
40°-50°	361.2	17.0
50°-60°	288.4	13.6
60°-70°	195.9	9.2
70°-80°	100.2	4.7
80°-90°	23.7	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°	745.6	35.1
0°-40°	1153.7	54.3
0°-60°	1803.2	84.9
0°-90°	2123.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2123.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	962	962	962	962	962	
5°	963	1075	967	855	963	91
15°	905	1321	917	634	905	255
25°	813	1101	816	509	813	372
35°	663	599	674	422	663	415
45°	498	361	506	347	498	386
55°	342	254	344	268	342	305
65°	203	156	206	181	203	201
75°	95	77	98	92	95	102
85°	19	20	21	15	19	24
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°	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2
2.5°	967.4	969.6	973.3	974.1	981.5	987.4	994.0	994.0	996.3	995.5	989.6
5°	963.0	969.6	979.3	987.4	1000.7	1006.6	1015.5	1022.2	1028.1	1032.5	1031.8
7.5°	955.6	967.4	981.5	997.0	1014.8	1025.1	1037.7	1049.5	1057.7	1065.0	1070.2
10°	943.0	963.0	982.2	1002.9	1025.8	1039.9	1054.7	1070.2	1082.8	1096.9	1110.2
12.5°	926.0	954.8	978.5	1005.9	1034.0	1049.5	1073.2	1085.0	1109.4	1144.9	1154.5
15°	904.6	943.8	965.9	1000.7	1037.7	1050.3	1082.8	1102.0	1152.3	1174.5	1201.1
17.5°	884.6	928.2	957.8	997.7	1034.0	1058.4	1090.2	1129.4	1171.6	1203.4	1232.9
20°	868.3	910.5	946.0	990.3	1036.2	1067.3	1100.6	1147.9	1193.7	1226.3	1249.2
22.5°	831.3	885.3	926.7	976.3	1031.8	1074.7	1106.5	1158.2	1207.8	1227.8	1247.7
25°	812.8	859.4	907.5	963.7	1028.8	1079.8	1107.2	1164.9	1208.5	1215.9	1220.4
27.5°	778.8	831.3	887.5	951.9	1028.1	1071.0	1105.7	1158.2	1193.0	1187.8	1174.5
30°	736.7	801.0	863.1	932.7	1017.7	1064.3	1096.9	1144.9	1162.7	1136.1	1112.4
32.5°	705.6	766.2	835.0	915.6	1005.9	1050.3	1082.1	1119.8	1123.5	1075.4	1035.5
35°	663.4	730.7	808.4	893.5	985.9	1025.8	1055.4	1078.4	1060.6	993.3	946.0
37.5°	625.7	692.3	775.1	861.7	958.5	997.7	1021.4	1025.1	981.5	922.3	852.8
40°	584.3	653.1	739.6	830.6	928.2	962.2	977.0	965.9	903.1	834.3	753.7
42.5°	542.9	610.9	704.1	797.3	889.8	918.6	924.5	894.2	817.3	736.7	643.5
45°	497.8	568.8	662.0	755.9	845.4	861.7	862.4	818.8	727.8	643.5	556.9
47.5°	460.8	526.6	619.1	713.0	788.4	799.5	795.1	744.8	645.7	551.0	475.6
50°	420.1	483.0	574.7	667.1	731.5	734.4	723.3	651.6	554.7	468.2	408.3
52.5°	376.5	440.1	524.4	613.1	670.8	666.4	644.9	568.0	477.1	405.3	359.5
55°	341.7	397.9	477.1	563.6	604.3	591.7	568.0	489.6	417.9	357.2	317.3
57.5°	303.2	352.8	430.5	505.9	529.6	517.7	494.1	420.8	354.3	308.4	281.8
60°	267.0	312.1	380.2	443.0	461.5	448.9	421.6	355.8	307.7	269.2	249.3
62.5°	233.7	272.9	329.9	387.6	395.0	382.4	358.7	305.5	264.0	233.7	218.9
65°	202.7	239.6	285.5	329.1	335.8	322.5	298.1	259.6	224.8	205.6	191.6
67.5°	172.3	201.9	242.6	274.4	278.1	265.5	245.6	214.5	193.0	172.3	162.0
70°	145.7	167.9	199.7	225.6	227.1	215.2	204.9	176.8	160.5	145.7	137.6
72.5°	119.8	135.4	159.8	179.0	179.7	172.3	162.7	145.0	130.9	120.6	112.4
75°	94.7	108.0	122.8	139.8	139.0	133.1	125.7	114.6	102.8	96.2	92.5
77.5°	72.5	80.6	92.5	103.5	103.5	100.6	96.2	88.0	80.6	74.0	70.3
80°	51.8	57.0	66.6	70.3	71.7	71.0	67.3	61.4	58.4	53.3	51.8
82.5°	33.3	37.0	41.4	45.1	47.3	45.9	45.1	42.2	37.7	36.2	34.8
85°	19.2	20.7	22.9	25.1	25.9	25.1	26.6	24.4	22.2	22.2	21.4
87.5°	8.1	8.9	10.4	10.4	11.1	11.1	10.4	11.1	11.1	10.4	9.6
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°	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2
2.5°	1000.0	1000.7	1002.2	1009.6	1013.3	1014.0	1011.1	1017.7	1019.9	1017.7	1016.2
5°	1047.3	1051.7	1060.6	1070.2	1069.5	1070.2	1074.7	1079.1	1080.6	1074.7	1076.9
7.5°	1088.7	1097.6	1107.2	1122.0	1122.0	1129.4	1132.4	1136.1	1144.9	1140.5	1139.0
10°	1136.1	1147.9	1165.6	1189.3	1190.0	1197.4	1204.8	1216.7	1220.4	1217.4	1218.9
12.5°	1195.2	1218.2	1219.6	1245.5	1257.3	1258.8	1270.7	1268.4	1275.8	1275.8	1288.4
15°	1221.1	1256.6	1276.6	1301.7	1309.1	1300.2	1309.9	1320.2	1321.0	1321.0	1320.2
17.5°	1267.7	1281.8	1301.7	1315.0	1318.0	1318.0	1318.7	1323.2	1320.2	1314.3	1318.7
20°	1277.3	1283.2	1290.6	1289.2	1290.6	1283.2	1275.8	1268.4	1269.2	1265.5	1276.6
22.5°	1259.6	1258.1	1241.1	1230.0	1230.0	1215.2	1201.1	1194.5	1187.8	1190.0	1193.7
25°	1215.2	1192.3	1171.6	1155.3	1151.6	1127.9	1108.7	1102.8	1091.7	1100.6	1102.0
27.5°	1144.2	1118.3	1085.0	1071.0	1051.7	1042.1	1028.8	1011.1	988.1	1001.4	999.2
30°	1068.0	1029.5	1002.2	968.2	937.8	935.6	910.5	880.9	869.1	869.1	875.7
32.5°	983.0	931.9	892.0	843.9	814.3	801.7	771.4	741.8	748.5	726.3	734.4
35°	883.8	816.5	766.2	719.6	697.5	682.7	643.5	627.2	609.4	599.1	618.3
37.5°	789.2	711.5	647.2	596.1	588.0	561.4	534.7	524.4	514.0	518.5	517.7
40°	673.8	605.0	547.3	507.4	493.3	480.8	463.0	450.4	443.8	447.5	448.2
42.5°	569.5	511.8	468.9	440.8	429.0	420.1	411.2	400.9	398.7	398.7	401.6
45°	488.9	441.6	412.7	389.8	383.1	376.5	369.8	365.4	363.9	360.9	363.2
47.5°	424.5	386.8	369.1	352.1	344.7	343.2	337.3	335.0	332.1	331.3	332.1
50°	370.5	346.9	330.6	321.0	315.8	313.6	310.6	306.2	304.7	308.4	306.9
52.5°	332.8	310.6	301.8	292.1	289.2	286.2	281.8	282.5	281.8	280.3	280.3
55°	295.1	281.1	272.2	264.8	264.0	261.1	257.4	255.9	255.2	253.7	255.9
57.5°	264.8	253.7	245.6	238.9	235.9	235.9	232.2	229.3	229.3	228.5	229.3
60°	234.5	223.4	218.2	211.5	209.3	208.6	206.4	204.9	202.7	202.7	202.7
62.5°	206.4	197.5	191.6	185.6	186.4	182.7	179.7	178.2	178.2	179.0	179.0
65°	179.7	173.8	166.4	161.2	159.8	159.0	157.5	156.8	154.6	156.1	156.1
67.5°	155.3	147.2	142.7	140.5	138.3	137.6	136.1	134.6	133.9	133.1	134.6
70°	130.9	124.3	120.6	119.1	116.9	116.1	115.4	113.2	113.9	114.6	115.4
72.5°	108.7	102.8	102.1	97.6	97.6	97.6	94.7	96.2	95.4	93.9	95.4
75°	85.8	82.8	81.4	79.1	79.9	79.1	78.4	76.2	76.2	76.9	77.7
77.5°	68.0	65.1	64.3	62.1	60.6	62.1	60.6	59.9	59.9	60.6	60.6
80°	50.3	48.8	46.6	46.6	46.6	45.9	45.9	45.9	45.1	44.4	45.1
82.5°	33.3	33.3	32.5	31.8	32.5	31.1	31.8	31.8	31.8	31.8	31.8
85°	21.4	20.7	20.7	20.0	20.0	20.0	20.7	19.2	19.2	20.0	20.0
87.5°	9.6	9.6	9.6	10.4	9.6	9.6	9.6	10.4	9.6	9.6	9.6
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°	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2
2.5°	1019.9	1014.8	1010.3	1011.1	1014.8	1011.8	1004.4	994.8	991.1	986.6	991.1
5°	1081.3	1076.9	1068.0	1068.7	1066.5	1063.6	1051.7	1036.9	1036.9	1025.1	1023.6
7.5°	1142.0	1135.3	1129.4	1127.9	1119.8	1113.9	1103.5	1082.8	1074.7	1060.6	1052.5
10°	1210.0	1204.8	1198.2	1190.0	1185.6	1175.3	1158.2	1127.9	1113.1	1093.9	1079.8
12.5°	1278.8	1278.1	1263.3	1247.0	1246.3	1230.0	1218.2	1177.5	1157.5	1131.6	1098.3
15°	1322.4	1318.7	1310.6	1302.5	1304.7	1286.9	1260.3	1212.2	1198.9	1167.9	1132.4
17.5°	1321.7	1321.7	1319.5	1318.0	1315.8	1310.6	1295.8	1264.0	1242.6	1203.4	1170.1
20°	1279.5	1289.2	1291.4	1290.6	1298.0	1301.7	1301.0	1281.0	1264.0	1229.2	1195.2
22.5°	1195.2	1217.4	1227.0	1232.9	1248.5	1256.6	1275.8	1268.4	1264.0	1238.1	1209.3
25°	1116.8	1124.2	1153.1	1154.5	1176.0	1196.0	1215.2	1227.8	1244.0	1234.4	1210.0
27.5°	1015.5	1032.5	1053.2	1068.7	1073.2	1113.9	1145.7	1169.3	1206.3	1209.3	1201.1
30°	900.9	909.0	943.0	963.7	987.4	1017.0	1062.8	1103.5	1136.8	1167.1	1177.5
32.5°	761.1	794.3	814.3	839.5	860.2	912.7	968.9	1021.4	1059.9	1110.9	1133.1
35°	633.1	659.0	693.0	703.4	741.1	785.5	858.7	926.0	984.4	1036.2	1081.3
37.5°	527.3	548.1	584.3	600.6	622.8	679.7	741.1	824.7	894.9	958.5	1014.8
40°	454.9	470.4	497.8	502.9	521.4	573.2	622.8	701.2	794.3	880.1	941.5
42.5°	405.3	412.7	431.2	437.9	449.7	484.4	528.8	602.8	689.3	778.1	864.6
45°	369.8	375.0	386.1	392.0	406.8	422.3	458.6	517.7	585.8	675.3	768.5
47.5°	338.0	344.7	349.1	352.8	360.9	377.9	401.6	445.2	510.3	592.4	682.7
50°	311.4	313.6	321.7	322.5	327.7	338.7	360.9	387.6	439.3	505.9	593.2
52.5°	284.8	287.0	292.1	297.3	299.5	308.4	323.2	345.4	383.9	436.4	514.0
55°	258.1	261.1	266.3	270.0	272.2	279.6	288.5	309.9	340.2	377.2	440.8
57.5°	231.5	238.2	239.6	241.9	245.6	253.7	261.8	274.4	298.1	332.1	378.7
60°	206.4	208.6	213.7	216.0	219.7	224.1	234.5	244.1	261.1	287.7	329.9
62.5°	180.5	185.6	187.9	190.1	193.0	198.2	204.9	215.2	230.0	251.5	284.8
65°	158.3	159.0	163.5	166.4	169.4	173.1	179.7	189.3	198.2	218.2	242.6
67.5°	136.8	138.3	139.8	142.7	146.4	150.1	156.1	161.2	172.3	185.6	204.9
70°	116.1	116.1	119.8	122.0	121.3	125.7	130.2	136.1	144.2	156.8	172.3
72.5°	97.6	96.9	99.8	100.6	102.1	105.0	108.0	113.9	118.3	128.0	139.8
75°	77.7	79.1	80.6	80.6	82.8	85.1	88.0	91.0	96.2	102.1	110.9
77.5°	61.4	61.4	62.9	63.6	65.8	65.1	68.0	71.0	74.7	79.9	86.5
80°	45.1	46.6	46.6	46.6	47.3	48.1	51.0	53.3	55.5	59.2	62.1
82.5°	31.8	31.8	33.3	33.3	33.3	34.8	34.8	35.5	37.0	39.2	41.4
85°	20.0	20.0	20.0	20.7	20.0	20.7	22.2	21.4	22.2	23.7	23.7
87.5°	9.6	9.6	9.6	9.6	9.6	10.4	9.6	10.4	11.1	11.1	11.1
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: P997600

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2
2.5°	987.4	983.7	981.5	983.0	978.5	967.4	967.4	971.1	966.7	962.2	955.6
5°	1014.8	1007.4	1002.9	1002.2	991.8	974.1	970.4	966.7	957.1	946.7	935.6
7.5°	1041.4	1028.1	1020.7	1015.5	1000.7	977.8	968.2	960.0	944.5	929.0	914.9
10°	1063.6	1044.3	1035.5	1027.3	1008.1	979.3	963.7	948.9	929.0	909.0	891.2
12.5°	1081.3	1059.1	1048.0	1036.2	1012.5	974.8	955.6	931.9	911.9	885.3	867.6
15°	1110.9	1065.0	1054.7	1043.6	1019.2	967.4	943.8	917.1	889.8	854.3	835.0
17.5°	1134.6	1073.2	1072.4	1048.8	1017.0	964.5	928.2	893.5	863.9	828.4	798.0
20°	1148.6	1085.8	1073.9	1049.5	1009.6	944.5	906.8	868.3	836.5	793.6	763.3
22.5°	1160.5	1103.5	1072.4	1042.9	994.0	937.8	882.4	846.1	802.5	755.9	727.0
25°	1164.9	1107.2	1074.7	1040.6	983.0	918.6	855.7	816.5	767.7	725.6	686.4
27.5°	1165.6	1106.5	1066.5	1031.0	967.4	893.5	829.1	787.7	733.7	684.9	645.7
30°	1158.2	1098.3	1062.1	1023.6	952.6	870.5	796.6	750.7	693.0	644.2	603.5
32.5°	1136.1	1082.1	1052.5	1010.3	933.4	838.7	765.5	714.5	653.8	605.7	566.5
35°	1099.1	1062.1	1029.5	990.3	908.3	809.1	734.4	674.5	613.1	567.3	530.3
37.5°	1053.2	1033.2	1002.9	964.5	879.4	782.5	699.7	633.1	571.7	527.3	491.1
40°	991.1	996.3	966.7	931.9	845.4	746.3	654.6	591.0	533.3	491.8	456.3
42.5°	923.8	945.2	928.2	894.9	807.7	706.3	621.3	551.0	494.8	451.9	422.3
45°	851.3	888.3	877.9	853.5	768.5	664.2	573.9	505.9	456.3	414.9	389.0
47.5°	772.2	824.7	824.7	806.9	724.8	622.0	533.3	463.7	414.9	385.3	360.2
50°	691.5	750.7	760.3	748.5	676.0	573.9	483.7	420.8	378.7	349.8	331.3
52.5°	607.2	676.0	693.8	687.8	624.2	528.1	443.0	381.6	343.2	318.0	301.8
55°	526.6	606.5	625.7	627.9	568.8	477.8	397.9	343.9	306.9	289.9	275.9
57.5°	450.4	527.3	548.8	552.5	512.6	431.9	355.8	308.4	275.1	261.1	250.0
60°	385.3	449.7	477.8	485.9	451.2	378.7	316.6	270.7	245.6	232.2	221.9
62.5°	332.1	383.9	413.4	415.7	400.1	332.1	275.9	237.4	216.0	204.1	199.0
65°	280.3	326.9	344.7	353.5	341.0	287.7	238.2	206.4	189.3	179.0	173.8
67.5°	238.9	268.5	283.3	295.1	282.5	242.6	202.7	176.8	164.2	153.8	150.9
70°	196.0	220.4	231.5	243.3	232.2	201.9	173.1	149.4	138.3	130.2	126.5
72.5°	156.8	176.0	186.4	193.8	187.1	162.0	138.3	122.0	113.9	108.0	105.8
75°	124.3	137.6	143.5	148.7	145.7	126.5	111.7	98.4	91.0	85.8	84.3
77.5°	94.7	104.3	110.9	112.4	108.7	96.2	83.6	75.4	69.5	66.6	65.1
80°	67.3	73.2	76.9	79.1	75.4	70.3	61.4	55.5	50.3	46.6	45.9
82.5°	45.1	48.1	51.0	50.3	48.8	44.4	39.2	36.2	34.0	31.1	31.1
85°	25.9	26.6	28.1	28.8	28.1	25.1	22.2	20.7	19.2	17.0	17.0
87.5°	11.1	11.8	11.8	12.6	11.1	11.1	9.6	8.1	8.1	7.4	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: P997600

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2
2.5°	951.9	955.6	954.8	947.5	939.3	932.7	920.1	921.6	917.1	917.9	922.3
5°	928.2	928.2	925.3	914.9	901.6	894.2	880.1	876.4	867.6	866.8	866.1
7.5°	903.1	899.4	895.7	880.9	864.6	852.8	833.5	829.1	820.2	814.3	811.4
10°	873.5	868.3	860.9	843.9	823.9	809.1	789.2	783.3	766.2	758.8	754.4
12.5°	840.9	838.0	826.2	812.1	779.6	763.3	734.4	740.4	723.3	708.6	706.3
15°	808.4	797.3	790.7	767.7	728.5	721.1	698.2	686.4	670.8	659.0	659.0
17.5°	776.6	759.6	744.8	720.4	691.5	670.8	653.8	647.9	628.7	616.8	614.6
20°	734.4	715.2	711.5	676.8	656.8	633.9	617.6	602.8	588.7	583.6	579.9
22.5°	694.5	672.3	666.4	636.8	616.8	593.9	577.6	567.3	556.9	553.2	546.6
25°	651.6	638.3	629.4	597.6	575.4	554.0	542.9	535.5	525.9	525.1	520.7
27.5°	610.2	597.6	588.7	558.4	542.1	522.2	513.3	505.2	500.0	497.8	495.5
30°	574.7	560.6	550.3	528.1	508.1	491.8	484.4	479.3	476.3	472.6	471.9
32.5°	535.5	527.3	513.3	496.3	480.8	465.2	460.8	457.1	452.6	451.2	450.4
35°	502.2	491.1	482.2	463.0	456.3	443.0	437.9	434.9	429.0	427.5	426.0
37.5°	469.7	459.3	449.7	437.9	425.3	417.9	414.9	410.5	407.5	408.3	406.8
40°	437.1	429.0	421.6	409.0	401.6	397.9	392.0	387.6	386.1	386.8	386.1
42.5°	405.3	397.9	393.5	383.9	376.5	372.8	369.1	364.6	366.9	366.9	369.1
45°	376.5	369.8	366.9	359.5	355.0	349.1	345.4	344.7	347.6	346.9	346.9
47.5°	346.9	344.7	341.0	334.3	328.4	324.7	324.0	324.0	326.9	328.4	327.7
50°	324.0	319.5	315.1	309.9	305.5	304.0	301.8	303.2	306.2	306.2	307.7
52.5°	295.1	292.1	290.7	286.2	283.3	283.3	283.3	284.0	286.2	288.5	287.7
55°	270.0	267.7	266.3	264.0	260.3	261.1	260.3	261.8	264.0	266.3	267.7
57.5°	243.3	242.6	241.1	237.4	237.4	236.7	238.9	239.6	243.3	244.8	247.0
60°	219.7	217.4	217.4	214.5	214.5	214.5	216.7	218.9	221.9	222.6	224.1
62.5°	194.5	194.5	193.8	191.6	191.6	193.8	194.5	197.5	199.0	199.0	201.2
65°	170.9	170.1	169.4	170.1	170.9	170.9	173.1	174.5	176.0	176.8	177.5
67.5°	147.2	146.4	147.9	147.2	148.7	151.6	150.9	153.1	155.3	155.3	156.1
70°	125.0	126.5	125.7	127.2	126.5	128.0	130.2	130.9	130.9	131.7	133.9
72.5°	104.3	104.3	104.3	103.5	104.3	105.8	107.2	108.0	109.5	110.2	112.4
75°	84.3	84.3	82.8	84.3	84.3	85.8	87.3	87.3	87.3	88.8	91.0
77.5°	63.6	64.3	63.6	65.1	65.1	65.8	67.3	66.6	68.0	68.8	69.5
80°	46.6	45.9	45.9	45.9	46.6	46.6	48.1	48.8	48.8	51.0	49.6
82.5°	29.6	30.3	29.6	30.3	30.3	31.1	30.3	31.1	31.8	33.3	32.5
85°	17.0	16.3	16.3	17.0	16.3	16.3	17.0	16.3	17.0	16.3	17.0
87.5°	6.7	5.9	5.9	5.9	5.9	5.2	5.2	4.4	4.4	4.4	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: P997600

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2
2.5°	917.1	919.3	914.2	912.7	914.2	909.0	910.5	911.9	911.9	914.2	915.6
5°	863.9	860.9	855.7	854.3	852.8	855.0	853.5	855.7	856.5	861.7	862.4
7.5°	811.4	806.9	802.5	798.0	796.6	792.9	796.6	796.6	801.7	800.3	804.0
10°	749.2	748.5	742.6	740.4	737.4	731.5	739.6	737.4	741.1	747.8	749.2
12.5°	703.4	695.2	698.9	688.6	692.3	686.4	687.1	687.1	693.0	693.8	692.3
15°	659.7	653.1	643.5	639.0	636.8	633.9	643.5	644.2	639.8	650.1	646.4
17.5°	615.4	615.4	606.5	604.3	598.4	601.3	599.8	600.6	599.1	606.5	610.2
20°	576.9	573.2	570.2	571.0	563.6	562.1	560.6	562.1	567.3	572.5	573.9
22.5°	545.8	543.6	536.2	537.7	531.8	534.0	532.5	536.2	537.0	537.0	542.1
25°	516.3	513.3	514.0	511.1	508.9	508.9	506.6	508.9	511.8	513.3	514.0
27.5°	494.1	491.8	488.1	485.9	487.4	483.7	486.7	488.9	488.9	487.4	488.9
30°	467.4	468.9	468.9	461.5	464.5	463.0	465.2	466.7	466.7	467.4	466.0
32.5°	449.7	445.2	444.5	443.8	443.8	440.8	440.8	443.0	443.8	444.5	446.7
35°	426.0	426.0	422.3	424.5	421.6	422.3	421.6	422.3	423.8	421.6	423.8
37.5°	404.6	405.3	403.8	405.3	406.1	404.6	403.1	406.1	404.6	404.6	403.1
40°	386.1	385.3	386.1	386.1	386.1	386.8	385.3	385.3	385.3	383.9	382.4
42.5°	370.5	366.1	367.6	368.3	366.1	366.1	366.9	366.1	368.3	363.9	363.9
45°	348.4	346.9	347.6	347.6	349.1	346.9	348.4	349.1	346.9	346.1	344.7
47.5°	328.4	329.9	328.4	329.9	329.9	331.3	328.4	329.1	329.9	326.9	324.7
50°	308.4	308.4	310.6	309.9	310.6	309.2	309.2	308.4	309.2	307.7	305.5
52.5°	289.9	287.7	291.4	290.7	289.9	289.2	288.5	289.2	287.7	286.2	286.2
55°	267.0	267.0	269.2	270.0	270.0	268.5	267.0	267.7	267.0	266.3	265.5
57.5°	248.5	245.6	247.0	247.8	247.8	245.6	247.0	245.6	245.6	246.3	244.1
60°	224.8	224.8	223.4	225.6	225.6	224.1	224.1	224.8	223.4	222.6	221.9
62.5°	199.7	200.4	202.7	203.4	204.1	202.7	201.2	201.9	201.9	199.7	200.4
65°	178.2	179.7	182.7	181.9	180.5	181.2	179.7	180.5	178.2	179.0	176.8
67.5°	157.5	156.8	157.5	157.5	159.0	158.3	156.8	156.8	156.1	158.3	156.1
70°	135.4	135.4	135.4	135.4	136.1	136.8	135.4	133.9	134.6	133.1	132.4
72.5°	112.4	113.2	112.4	113.9	111.7	113.2	113.2	112.4	111.7	111.7	111.7
75°	91.0	92.5	90.2	91.0	90.2	91.7	91.0	91.0	89.5	88.8	89.5
77.5°	69.5	70.3	68.8	69.5	68.8	69.5	69.5	68.8	68.8	68.8	68.8
80°	49.6	50.3	49.6	48.8	48.1	49.6	48.1	48.8	49.6	48.8	50.3
82.5°	31.8	31.8	31.1	31.8	30.3	30.3	31.1	31.1	30.3	31.8	30.3
85°	15.5	15.5	17.0	15.5	14.8	14.8	14.8	15.5	14.8	16.3	15.5
87.5°	3.7	3.0	3.7	3.7	3.0	3.0	3.7	3.0	3.7	4.4	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: P997600

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2	962.2
2.5°	913.4	919.3	917.1	909.0	918.6	918.6	925.3	925.3	933.4	936.4	940.8
5°	861.7	866.1	869.8	866.1	872.7	883.1	889.0	894.2	905.3	909.7	916.4
7.5°	806.2	814.3	818.0	818.0	829.1	840.9	852.8	860.2	875.7	881.6	888.3
10°	752.2	761.8	769.2	768.5	787.0	794.3	809.1	826.2	841.7	850.6	860.2
12.5°	695.2	700.4	710.8	725.6	730.0	743.3	760.3	781.8	809.9	818.0	832.1
15°	647.9	662.0	670.1	676.8	687.1	699.7	718.2	738.9	767.0	784.7	799.5
17.5°	608.0	626.5	631.6	630.2	643.5	662.7	684.1	699.7	724.8	746.3	760.3
20°	575.4	582.8	591.7	595.4	605.7	626.5	647.2	664.9	685.6	702.6	718.9
22.5°	542.9	548.8	556.2	562.8	571.0	582.8	602.8	625.0	644.9	661.2	679.7
25°	516.3	520.0	526.6	531.8	540.7	548.8	562.8	587.3	610.9	620.5	636.8
27.5°	490.4	493.3	497.8	503.7	508.1	516.3	528.8	548.8	573.2	582.8	605.0
30°	467.4	469.7	474.1	477.1	479.3	488.9	498.5	514.0	532.5	545.8	562.1
32.5°	446.0	448.2	452.6	453.4	456.3	461.5	470.4	484.4	500.7	511.8	525.9
35°	422.3	423.8	428.2	429.7	431.9	436.4	443.0	453.4	468.2	476.3	488.9
37.5°	403.8	403.1	406.1	408.3	411.2	413.4	415.7	426.0	437.1	444.5	454.1
40°	383.9	382.4	383.1	386.1	387.6	390.5	390.5	400.9	408.3	414.2	421.6
42.5°	363.9	363.2	361.7	363.2	364.6	365.4	366.1	373.5	380.9	386.1	394.2
45°	343.9	343.2	341.7	342.4	342.4	343.9	346.1	349.1	354.3	358.7	363.2
47.5°	325.4	324.0	321.7	321.0	322.5	322.5	322.5	325.4	330.6	332.1	336.5
50°	306.2	304.0	301.0	299.5	299.5	298.8	300.3	301.0	305.5	306.9	310.6
52.5°	285.5	284.0	281.1	278.1	278.8	277.4	278.1	278.8	280.3	282.5	284.8
55°	264.8	261.8	259.6	258.9	256.6	256.6	254.4	257.4	256.6	257.4	260.3
57.5°	244.8	241.9	238.2	236.7	234.5	233.7	232.2	231.5	232.2	234.5	236.7
60°	221.1	219.7	217.4	215.2	213.7	211.5	210.1	210.1	209.3	209.3	210.1
62.5°	198.2	197.5	194.5	193.8	192.3	190.8	188.6	187.1	187.1	188.6	189.3
65°	176.0	175.3	173.1	172.3	168.6	167.2	166.4	165.7	164.2	164.2	164.2
67.5°	155.3	153.1	153.1	149.4	146.4	145.0	143.5	142.7	142.7	142.7	143.5
70°	132.4	132.4	130.2	128.0	125.0	125.7	123.5	121.3	121.3	119.8	120.6
72.5°	110.2	109.5	107.2	106.5	104.3	102.1	100.6	102.1	99.8	99.1	99.8
75°	88.8	88.0	86.5	85.1	85.8	83.6	81.4	80.6	80.6	79.1	79.1
77.5°	68.0	69.5	66.6	65.8	64.3	62.9	62.1	61.4	61.4	61.4	62.9
80°	47.3	48.1	48.1	46.6	47.3	45.1	45.1	45.1	42.9	43.6	44.4
82.5°	30.3	30.3	29.6	30.3	29.6	29.6	28.8	28.8	28.1	28.1	28.8
85°	17.0	16.3	15.5	17.0	16.3	16.3	15.5	15.5	15.5	15.5	15.5
87.5°	3.7	4.4	4.4	4.4	4.4	5.2	5.2	5.2	5.9	5.9	5.9
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: P997600

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	962.2	962.2	962.2	962.2
2.5°	944.5	944.5	955.6	967.4
5°	923.8	929.0	946.7	963.0
7.5°	903.8	912.7	934.9	955.6
10°	879.4	891.2	918.6	943.0
12.5°	855.7	866.8	898.6	926.0
15°	822.5	836.5	870.5	904.6
17.5°	789.2	803.2	844.6	884.6
20°	750.0	768.5	815.1	868.3
22.5°	713.7	736.7	788.4	831.3
25°	673.8	709.3	757.4	812.8
27.5°	638.3	673.8	722.6	778.8
30°	598.4	634.6	684.9	736.7
32.5°	559.9	593.2	642.0	705.6
35°	520.0	551.8	599.1	663.4
37.5°	483.7	514.8	566.5	625.7
40°	448.2	480.8	525.1	584.3
42.5°	414.9	443.8	483.7	542.9
45°	384.6	405.3	442.3	497.8
47.5°	352.8	371.3	405.3	460.8
50°	323.2	338.7	368.3	420.1
52.5°	294.4	307.7	335.0	376.5
55°	268.5	281.1	301.0	341.7
57.5°	241.9	251.5	270.7	303.2
60°	216.0	224.8	240.4	267.0
62.5°	190.1	197.5	212.3	233.7
65°	167.2	173.1	184.2	202.7
67.5°	145.0	148.7	157.5	172.3
70°	123.5	126.5	133.9	145.7
72.5°	100.6	103.5	111.7	119.8
75°	81.4	82.1	88.0	94.7
77.5°	63.6	62.9	67.3	72.5
80°	43.6	45.9	49.6	51.8
82.5°	29.6	30.3	31.8	33.3
85°	16.3	17.0	17.0	19.2
87.5°	6.7	7.4	7.4	8.1
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P997600

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_4000K

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	21.43	22.95	21.80	23.26	23.58	17.70	19.22	18.06	19.53	19.84
	3H	22.55	23.91	22.93	24.24	24.60	19.11	20.47	19.49	20.80	21.16
	4H	22.87	24.15	23.27	24.50	24.88	19.62	20.90	20.02	21.25	21.62
	6H	23.06	24.24	23.48	24.61	25.00	19.98	21.16	20.39	21.52	21.92
	8H	23.10	24.23	23.53	24.62	25.02	20.09	21.21	20.52	21.60	22.00
	12H	23.12	24.19	23.55	24.57	25.00	20.16	21.24	20.59	21.62	22.05
4H	2H	21.55	22.83	21.95	23.18	23.56	18.50	19.77	18.90	20.12	20.50
	3H	22.88	23.94	23.29	24.34	24.75	20.07	21.13	20.48	21.53	21.94
	4H	23.36	24.31	23.79	24.73	25.17	20.67	21.63	21.11	22.04	22.48
	6H	23.69	24.52	24.14	24.96	25.42	21.13	21.96	21.58	22.40	22.86
	8H	23.76	24.54	24.23	24.98	25.45	21.27	22.05	21.73	22.49	22.96
	12H	23.81	24.50	24.29	24.98	25.45	21.38	22.07	21.86	22.55	23.02
8H	4H	23.44	24.22	23.91	24.66	25.13	21.08	21.86	21.55	22.30	22.77
	6H	23.85	24.49	24.35	24.98	25.46	21.62	22.26	22.12	22.76	23.23
	8H	23.98	24.55	24.49	25.06	25.55	21.82	22.40	22.34	22.91	23.39
	12H	24.07	24.57	24.58	25.07	25.63	21.99	22.49	22.50	22.99	23.55
12H	4H	23.43	24.13	23.92	24.60	25.07	21.14	21.83	21.62	22.31	22.78
	6H	23.84	24.42	24.36	24.93	25.42	21.70	22.27	22.21	22.78	23.27
	8H	24.01	24.52	24.52	25.01	25.57	21.95	22.45	22.46	22.95	23.51