

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: P997598

Luminaire Tested: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997598
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_3000K
Description: Define 2 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

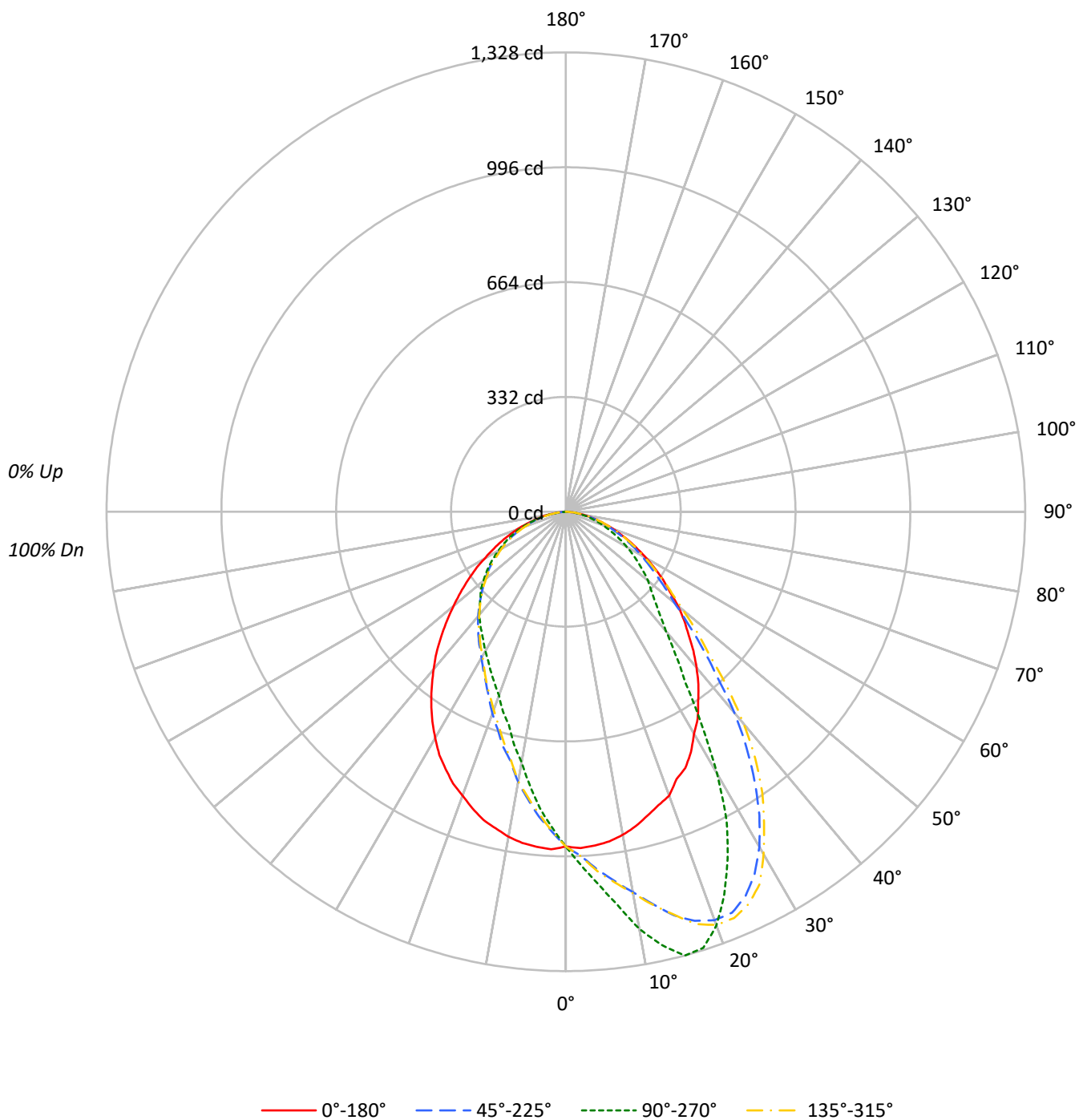
Lumens per Lamp: N/A
Luminaire Lumens: 2135.0 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.09 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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°	15318	15318	15318	15318
5°	15388	17172	15446	13662
10°	15242	19679	15339	11824
15°	14908	21769	15114	10446
20°	14709	21437	14709	9523
25°	14276	19331	14343	8937
30°	13540	15975	13800	8510
35°	12893	11643	13107	8207
40°	12142	9299	12280	8038
45°	11206	8126	11390	7808
50°	10404	7639	10422	7656
55°	9483	7040	9546	7451
60°	8500	6452	8617	7136
65°	7633	5877	7772	6824
70°	6780	5336	6952	6368
75°	5822	4734	6049	5639
80°	4749	4066	5087	4540
85°	3505	3651	3778	2706

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 155°

Vertical Angle: 45°

Luminance: 19997 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.2	4.3
10°-20°	268.3	12.6
20°-30°	389.3	18.2
30°-40°	410.4	19.2
40°-50°	363.2	17.0
50°-60°	290.0	13.6
60°-70°	197.0	9.2
70°-80°	100.8	4.7
80°-90°	23.8	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°	749.8	35.1
0°-40°	1160.2	54.3
0°-60°	1813.4	84.9
0°-90°	2135.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2135.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	968	968	968	968	968	
5°	968	1081	972	860	968	92
15°	910	1328	922	637	910	257
25°	817	1107	821	512	817	374
35°	667	602	678	425	667	417
45°	501	363	509	349	501	388
55°	344	255	346	270	344	307
65°	204	157	208	182	204	203
75°	95	77	99	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°	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7
2.5°	972.9	975.1	978.8	979.6	987.0	993.0	999.7	999.7	1001.9	1001.2	995.2
5°	968.4	975.1	984.8	993.0	1006.4	1012.3	1021.2	1027.9	1033.9	1038.3	1037.6
7.5°	961.0	972.9	987.0	1002.6	1020.5	1030.9	1043.5	1055.4	1063.6	1071.1	1076.3
10°	948.3	968.4	987.8	1008.6	1031.6	1045.8	1060.7	1076.3	1088.9	1103.1	1116.4
12.5°	931.2	960.2	984.0	1011.6	1039.8	1055.4	1079.3	1091.2	1115.7	1151.4	1161.1
15°	909.7	949.1	971.4	1006.4	1043.5	1056.2	1088.9	1108.3	1158.8	1181.2	1207.9
17.5°	889.6	933.5	963.2	1003.4	1039.8	1064.4	1096.4	1135.8	1178.2	1210.2	1239.9
20°	873.2	915.6	951.3	995.9	1042.1	1073.3	1106.8	1154.4	1200.5	1233.2	1256.3
22.5°	836.0	890.3	932.0	981.8	1037.6	1080.7	1112.7	1164.8	1214.6	1234.7	1254.8
25°	817.4	864.3	912.6	969.2	1034.6	1085.9	1113.5	1171.5	1215.4	1222.8	1227.3
27.5°	783.2	836.0	892.6	957.3	1033.9	1077.0	1112.0	1164.8	1199.7	1194.5	1181.2
30°	740.8	805.5	868.0	937.9	1023.5	1070.3	1103.1	1151.4	1169.3	1142.5	1118.7
32.5°	709.6	770.6	839.7	920.8	1011.6	1056.2	1088.2	1126.1	1129.8	1081.5	1041.3
35°	667.2	734.9	813.0	898.5	991.5	1031.6	1061.4	1084.5	1066.6	998.9	951.3
37.5°	629.3	696.2	779.5	866.5	964.0	1003.4	1027.2	1030.9	987.0	927.5	857.6
40°	587.6	656.8	743.8	835.3	933.5	967.7	982.6	971.4	908.2	839.0	757.9
42.5°	545.9	614.4	708.1	801.8	894.8	923.8	929.7	899.3	821.9	740.8	647.1
45°	500.6	572.0	665.7	760.2	850.2	866.5	867.3	823.4	731.9	647.1	560.1
47.5°	463.4	529.6	622.6	717.0	792.9	804.0	799.6	749.0	649.3	554.1	478.3
50°	422.5	485.7	577.9	670.9	735.6	738.6	727.4	655.3	557.8	470.8	410.6
52.5°	378.6	442.6	527.4	616.6	674.6	670.2	648.6	571.2	479.7	407.6	361.5
55°	343.6	400.2	479.7	566.8	607.7	595.0	571.2	492.4	420.2	359.3	319.1
57.5°	305.0	354.8	432.9	508.8	532.6	520.7	496.9	423.2	356.3	310.2	283.4
60°	268.5	313.9	382.3	445.5	464.1	451.5	424.0	357.8	309.4	270.7	250.7
62.5°	235.0	274.5	331.7	389.8	397.2	384.5	360.7	307.2	265.5	235.0	220.2
65°	203.8	241.0	287.1	331.0	337.7	324.3	299.8	261.1	226.1	206.8	192.6
67.5°	173.3	203.1	244.0	275.9	279.7	267.0	246.9	215.7	194.1	173.3	162.9
70°	146.5	168.8	200.8	226.9	228.3	216.4	206.0	177.8	161.4	146.5	138.3
72.5°	120.5	136.1	160.7	180.0	180.7	173.3	163.6	145.8	131.7	121.2	113.1
75°	95.2	108.6	123.5	140.6	139.8	133.9	126.4	115.3	103.4	96.7	93.0
77.5°	72.9	81.1	93.0	104.1	104.1	101.2	96.7	88.5	81.1	74.4	70.7
80°	52.1	57.3	66.9	70.7	72.1	71.4	67.7	61.7	58.8	53.6	52.1
82.5°	33.5	37.2	41.7	45.4	47.6	46.1	45.4	42.4	37.9	36.4	35.0
85°	19.3	20.8	23.1	25.3	26.0	25.3	26.8	24.5	22.3	22.3	21.6
87.5°	8.2	8.9	10.4	10.4	11.2	11.2	10.4	11.2	11.2	10.4	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

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7
2.5°	1005.6	1006.4	1007.8	1015.3	1019.0	1019.7	1016.8	1023.5	1025.7	1023.5	1022.0
5°	1053.2	1057.7	1066.6	1076.3	1075.5	1076.3	1080.7	1085.2	1086.7	1080.7	1083.0
7.5°	1094.9	1103.8	1113.5	1128.3	1128.3	1135.8	1138.8	1142.5	1151.4	1146.9	1145.4
10°	1142.5	1154.4	1172.2	1196.0	1196.8	1204.2	1211.6	1223.5	1227.3	1224.3	1225.8
12.5°	1202.0	1225.0	1226.5	1252.6	1264.5	1265.9	1277.8	1275.6	1283.1	1283.1	1295.7
15°	1228.0	1263.7	1283.8	1309.1	1316.5	1307.6	1317.3	1327.7	1328.4	1328.4	1327.7
17.5°	1274.9	1289.0	1309.1	1322.5	1325.4	1325.4	1326.2	1330.7	1327.7	1321.7	1326.2
20°	1284.5	1290.5	1297.9	1296.4	1297.9	1290.5	1283.1	1275.6	1276.4	1272.6	1283.8
22.5°	1266.7	1265.2	1248.1	1236.9	1236.9	1222.1	1207.9	1201.2	1194.5	1196.8	1200.5
25°	1222.1	1199.0	1178.2	1161.8	1158.1	1134.3	1115.0	1109.0	1097.8	1106.8	1108.3
27.5°	1150.7	1124.6	1091.2	1077.0	1057.7	1048.0	1034.6	1016.8	993.7	1007.1	1004.9
30°	1074.0	1035.4	1007.8	973.6	943.1	940.9	915.6	885.9	874.0	874.0	880.7
32.5°	988.5	937.2	897.0	848.7	818.9	806.3	775.8	746.0	752.7	730.4	738.6
35°	888.8	821.2	770.6	723.7	701.4	686.5	647.1	630.7	612.9	602.5	621.8
37.5°	793.6	715.5	650.8	599.5	591.3	564.5	537.8	527.4	516.9	521.4	520.7
40°	677.6	608.4	550.4	510.2	496.1	483.5	465.6	453.0	446.3	450.0	450.7
42.5°	572.7	514.7	471.6	443.3	431.4	422.5	413.6	403.1	400.9	400.9	403.9
45°	491.7	444.0	415.0	392.0	385.3	378.6	371.9	367.4	365.9	363.0	365.2
47.5°	426.9	389.0	371.2	354.0	346.6	345.1	339.2	336.9	334.0	333.2	334.0
50°	372.6	348.8	332.5	322.8	317.6	315.4	312.4	307.9	306.4	310.2	308.7
52.5°	334.7	312.4	303.5	293.8	290.8	287.8	283.4	284.1	283.4	281.9	281.9
55°	296.8	282.6	273.7	266.3	265.5	262.6	258.8	257.4	256.6	255.1	257.4
57.5°	266.3	255.1	246.9	240.2	237.3	237.3	233.6	230.6	230.6	229.8	230.6
60°	235.8	224.6	219.4	212.7	210.5	209.8	207.5	206.0	203.8	203.8	203.8
62.5°	207.5	198.6	192.6	186.7	187.4	183.7	180.7	179.3	179.3	180.0	180.0
65°	180.7	174.8	167.4	162.1	160.7	159.9	158.4	157.7	155.5	156.9	156.9
67.5°	156.2	148.0	143.6	141.3	139.1	138.3	136.9	135.4	134.6	133.9	135.4
70°	131.7	125.0	121.2	119.8	117.5	116.8	116.0	113.8	114.5	115.3	116.0
72.5°	109.3	103.4	102.6	98.2	98.2	98.2	95.2	96.7	95.9	94.5	95.9
75°	86.3	83.3	81.8	79.6	80.3	79.6	78.8	76.6	76.6	77.4	78.1
77.5°	68.4	65.5	64.7	62.5	61.0	62.5	61.0	60.2	60.2	61.0	61.0
80°	50.6	49.1	46.9	46.9	46.9	46.1	46.1	46.1	45.4	44.6	45.4
82.5°	33.5	33.5	32.7	32.0	32.7	31.2	32.0	32.0	32.0	32.0	32.0
85°	21.6	20.8	20.8	20.1	20.1	20.1	20.8	19.3	19.3	20.1	20.1
87.5°	9.7	9.7	9.7	10.4	9.7	9.7	9.7	10.4	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

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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7
2.5°	1025.7	1020.5	1016.0	1016.8	1020.5	1017.5	1010.1	1000.4	996.7	992.2	996.7
5°	1087.4	1083.0	1074.0	1074.8	1072.6	1069.6	1057.7	1042.8	1042.8	1030.9	1029.4
7.5°	1148.4	1141.7	1135.8	1134.3	1126.1	1120.2	1109.7	1088.9	1080.7	1066.6	1058.4
10°	1216.9	1211.6	1205.0	1196.8	1192.3	1181.9	1164.8	1134.3	1119.4	1100.1	1085.9
12.5°	1286.0	1285.3	1270.4	1254.0	1253.3	1236.9	1225.0	1184.1	1164.0	1138.0	1104.5
15°	1329.9	1326.2	1318.0	1309.8	1312.1	1294.2	1267.4	1219.1	1205.7	1174.5	1138.8
17.5°	1329.2	1329.2	1326.9	1325.4	1323.2	1318.0	1303.1	1271.2	1249.6	1210.2	1176.7
20°	1286.8	1296.4	1298.7	1297.9	1305.4	1309.1	1308.3	1288.3	1271.2	1236.2	1202.0
22.5°	1202.0	1224.3	1234.0	1239.9	1255.5	1263.7	1283.1	1275.6	1271.2	1245.1	1216.1
25°	1123.1	1130.6	1159.6	1161.1	1182.6	1202.7	1222.1	1234.7	1251.1	1241.4	1216.9
27.5°	1021.2	1038.3	1059.2	1074.8	1079.3	1120.2	1152.1	1175.9	1213.1	1216.1	1207.9
30°	905.9	914.1	948.3	969.2	993.0	1022.7	1068.8	1109.7	1143.2	1173.7	1184.1
32.5°	765.4	798.8	818.9	844.2	865.0	917.8	974.4	1027.2	1065.9	1117.2	1139.5
35°	636.7	662.7	696.9	707.4	745.3	789.9	863.5	931.2	990.0	1042.1	1087.4
37.5°	530.3	551.2	587.6	604.0	626.3	683.6	745.3	829.3	900.0	964.0	1020.5
40°	457.4	473.1	500.6	505.8	524.4	576.4	626.3	705.1	798.8	885.1	946.9
42.5°	407.6	415.0	433.6	440.3	452.2	487.2	531.8	606.2	693.2	782.5	869.5
45°	371.9	377.1	388.3	394.2	409.1	424.7	461.2	520.7	589.1	679.1	772.8
47.5°	339.9	346.6	351.1	354.8	363.0	380.1	403.9	447.8	513.2	595.8	686.5
50°	313.1	315.4	323.6	324.3	329.5	340.7	363.0	389.8	441.8	508.8	596.5
52.5°	286.4	288.6	293.8	299.0	301.2	310.2	325.0	347.4	386.0	438.8	516.9
55°	259.6	262.6	267.8	271.5	273.7	281.2	290.1	311.7	342.1	379.3	443.3
57.5°	232.8	239.5	241.0	243.2	246.9	255.1	263.3	275.9	299.8	334.0	380.8
60°	207.5	209.8	215.0	217.2	220.9	225.4	235.8	245.5	262.6	289.3	331.7
62.5°	181.5	186.7	188.9	191.2	194.1	199.3	206.0	216.4	231.3	252.9	286.4
65°	159.2	159.9	164.4	167.4	170.3	174.0	180.7	190.4	199.3	219.4	244.0
67.5°	137.6	139.1	140.6	143.6	147.3	151.0	156.9	162.1	173.3	186.7	206.0
70°	116.8	116.8	120.5	122.7	122.0	126.4	130.9	136.9	145.0	157.7	173.3
72.5°	98.2	97.4	100.4	101.2	102.6	105.6	108.6	114.5	119.0	128.7	140.6
75°	78.1	79.6	81.1	81.1	83.3	85.5	88.5	91.5	96.7	102.6	111.6
77.5°	61.7	61.7	63.2	64.0	66.2	65.5	68.4	71.4	75.1	80.3	87.0
80°	45.4	46.9	46.9	46.9	47.6	48.3	51.3	53.6	55.8	59.5	62.5
82.5°	32.0	32.0	33.5	33.5	33.5	35.0	35.0	35.7	37.2	39.4	41.7
85°	20.1	20.1	20.1	20.8	20.1	20.8	22.3	21.6	22.3	23.8	23.8
87.5°	9.7	9.7	9.7	9.7	9.7	10.4	9.7	10.4	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: P997598

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7
2.5°	993.0	989.3	987.0	988.5	984.0	972.9	972.9	976.6	972.1	967.7	961.0
5°	1020.5	1013.1	1008.6	1007.8	997.4	979.6	975.9	972.1	962.5	952.1	940.9
7.5°	1047.3	1033.9	1026.4	1021.2	1006.4	983.3	973.6	965.5	949.8	934.2	920.1
10°	1069.6	1050.2	1041.3	1033.1	1013.8	984.8	969.2	954.3	934.2	914.1	896.3
12.5°	1087.4	1065.1	1054.0	1042.1	1018.3	980.3	961.0	937.2	917.1	890.3	872.5
15°	1117.2	1071.1	1060.7	1049.5	1025.0	972.9	949.1	922.3	894.8	859.1	839.7
17.5°	1141.0	1079.3	1078.5	1054.7	1022.7	969.9	933.5	898.5	868.8	833.1	802.6
20°	1155.1	1091.9	1080.0	1055.4	1015.3	949.8	911.9	873.2	841.2	798.1	767.6
22.5°	1167.0	1109.7	1078.5	1048.8	999.7	943.1	887.4	850.9	807.0	760.2	731.2
25°	1171.5	1113.5	1080.7	1046.5	988.5	923.8	860.6	821.2	772.1	729.7	690.2
27.5°	1172.2	1112.7	1072.6	1036.9	972.9	898.5	833.8	792.1	737.8	688.8	649.3
30°	1164.8	1104.5	1068.1	1029.4	958.0	875.5	801.1	755.0	696.9	647.8	606.9
32.5°	1142.5	1088.2	1058.4	1016.0	938.7	843.5	769.8	718.5	657.5	609.2	569.7
35°	1105.3	1068.1	1035.4	995.9	913.4	813.7	738.6	678.3	616.6	570.5	533.3
37.5°	1059.2	1039.1	1008.6	969.9	884.4	786.9	703.6	636.7	575.0	530.3	493.9
40°	996.7	1001.9	972.1	937.2	850.2	750.5	658.3	594.3	536.3	494.6	458.9
42.5°	929.0	950.6	933.5	900.0	812.2	710.3	624.8	554.1	497.6	454.5	424.7
45°	856.1	893.3	882.9	858.3	772.8	667.9	577.2	508.8	458.9	417.3	391.2
47.5°	776.5	829.3	829.3	811.5	728.9	625.5	536.3	466.4	417.3	387.5	362.2
50°	695.5	755.0	764.6	752.7	679.8	577.2	486.4	423.2	380.8	351.8	333.2
52.5°	610.7	679.8	697.7	691.7	627.8	531.1	445.5	383.8	345.1	319.8	303.5
55°	529.6	609.9	629.3	631.5	572.0	480.5	400.2	345.9	308.7	291.6	277.4
57.5°	453.0	530.3	551.9	555.6	515.5	434.4	357.8	310.2	276.7	262.6	251.4
60°	387.5	452.2	480.5	488.7	453.7	380.8	318.3	272.2	246.9	233.6	223.1
62.5°	334.0	386.0	415.8	418.0	402.4	334.0	277.4	238.8	217.2	205.3	200.1
65°	281.9	328.8	346.6	355.5	342.9	289.3	239.5	207.5	190.4	180.0	174.8
67.5°	240.2	270.0	284.9	296.8	284.1	244.0	203.8	177.8	165.1	154.7	151.7
70°	197.1	221.7	232.8	244.7	233.6	203.1	174.0	150.2	139.1	130.9	127.2
72.5°	157.7	177.0	187.4	194.9	188.2	162.9	139.1	122.7	114.5	108.6	106.4
75°	125.0	138.3	144.3	149.5	146.5	127.2	112.3	98.9	91.5	86.3	84.8
77.5°	95.2	104.9	111.6	113.1	109.3	96.7	84.0	75.9	69.9	66.9	65.5
80°	67.7	73.6	77.4	79.6	75.9	70.7	61.7	55.8	50.6	46.9	46.1
82.5°	45.4	48.3	51.3	50.6	49.1	44.6	39.4	36.4	34.2	31.2	31.2
85°	26.0	26.8	28.3	29.0	28.3	25.3	22.3	20.8	19.3	17.1	17.1
87.5°	11.2	11.9	11.9	12.6	11.2	11.2	9.7	8.2	8.2	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: P997598

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CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7
2.5°	957.3	961.0	960.2	952.8	944.6	937.9	925.3	926.8	922.3	923.1	927.5
5°	933.5	933.5	930.5	920.1	906.7	899.3	885.1	881.4	872.5	871.7	871.0
7.5°	908.2	904.5	900.7	885.9	869.5	857.6	838.3	833.8	824.9	818.9	815.9
10°	878.4	873.2	865.8	848.7	828.6	813.7	793.6	787.7	770.6	763.1	758.7
12.5°	845.7	842.7	830.8	816.7	784.0	767.6	738.6	744.5	727.4	712.6	710.3
15°	813.0	801.8	795.1	772.1	732.6	725.2	702.1	690.2	674.6	662.7	662.7
17.5°	781.0	763.9	749.0	724.5	695.5	674.6	657.5	651.6	632.2	620.3	618.1
20°	738.6	719.3	715.5	680.6	660.5	637.4	621.1	606.2	592.1	586.9	583.1
22.5°	698.4	676.1	670.2	640.4	620.3	597.3	580.9	570.5	560.1	556.4	549.7
25°	655.3	641.9	633.0	601.0	578.7	557.1	545.9	538.5	528.8	528.1	523.6
27.5°	613.6	601.0	592.1	561.6	545.2	525.1	516.2	508.0	502.8	500.6	498.3
30°	577.9	563.8	553.4	531.1	511.0	494.6	487.2	482.0	479.0	475.3	474.5
32.5°	538.5	530.3	516.2	499.1	483.5	467.8	463.4	459.7	455.2	453.7	453.0
35°	505.0	493.9	485.0	465.6	458.9	445.5	440.3	437.4	431.4	429.9	428.4
37.5°	472.3	461.9	452.2	440.3	427.7	420.2	417.3	412.8	409.8	410.6	409.1
40°	439.6	431.4	424.0	411.3	403.9	400.2	394.2	389.8	388.3	389.0	388.3
42.5°	407.6	400.2	395.7	386.0	378.6	374.9	371.2	366.7	368.9	368.9	371.2
45°	378.6	371.9	368.9	361.5	357.0	351.1	347.4	346.6	349.6	348.8	348.8
47.5°	348.8	346.6	342.9	336.2	330.2	326.5	325.8	325.8	328.8	330.2	329.5
50°	325.8	321.3	316.9	311.7	307.2	305.7	303.5	305.0	307.9	307.9	309.4
52.5°	296.8	293.8	292.3	287.8	284.9	284.9	284.9	285.6	287.8	290.1	289.3
55°	271.5	269.3	267.8	265.5	261.8	262.6	261.8	263.3	265.5	267.8	269.3
57.5°	244.7	244.0	242.5	238.8	238.8	238.0	240.2	241.0	244.7	246.2	248.4
60°	220.9	218.7	218.7	215.7	215.7	215.7	217.9	220.2	223.1	223.9	225.4
62.5°	195.6	195.6	194.9	192.6	192.6	194.9	195.6	198.6	200.1	200.1	202.3
65°	171.8	171.1	170.3	171.1	171.8	171.8	174.0	175.5	177.0	177.8	178.5
67.5°	148.0	147.3	148.8	148.0	149.5	152.5	151.7	154.0	156.2	156.2	156.9
70°	125.7	127.2	126.4	127.9	127.2	128.7	130.9	131.7	131.7	132.4	134.6
72.5°	104.9	104.9	104.9	104.1	104.9	106.4	107.9	108.6	110.1	110.8	113.1
75°	84.8	84.8	83.3	84.8	84.8	86.3	87.8	87.8	87.8	89.3	91.5
77.5°	64.0	64.7	64.0	65.5	65.5	66.2	67.7	66.9	68.4	69.2	69.9
80°	46.9	46.1	46.1	46.1	46.9	46.9	48.3	49.1	49.1	51.3	49.8
82.5°	29.8	30.5	29.8	30.5	30.5	31.2	30.5	31.2	32.0	33.5	32.7
85°	17.1	16.4	16.4	17.1	16.4	16.4	17.1	16.4	17.1	16.4	17.1
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

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CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7
2.5°	922.3	924.5	919.3	917.8	919.3	914.1	915.6	917.1	917.1	919.3	920.8
5°	868.8	865.8	860.6	859.1	857.6	859.8	858.3	860.6	861.3	866.5	867.3
7.5°	815.9	811.5	807.0	802.6	801.1	797.4	801.1	801.1	806.3	804.8	808.5
10°	753.5	752.7	746.8	744.5	741.6	735.6	743.8	741.6	745.3	752.0	753.5
12.5°	707.4	699.2	702.9	692.5	696.2	690.2	691.0	691.0	696.9	697.7	696.2
15°	663.5	656.8	647.1	642.6	640.4	637.4	647.1	647.8	643.4	653.8	650.1
17.5°	618.8	618.8	609.9	607.7	601.7	604.7	603.2	604.0	602.5	609.9	613.6
20°	580.2	576.4	573.5	574.2	566.8	565.3	563.8	565.3	570.5	575.7	577.2
22.5°	548.9	546.7	539.3	540.7	534.8	537.0	535.5	539.3	540.0	540.0	545.2
25°	519.2	516.2	516.9	514.0	511.7	511.7	509.5	511.7	514.7	516.2	516.9
27.5°	496.9	494.6	490.9	488.7	490.2	486.4	489.4	491.7	491.7	490.2	491.7
30°	470.1	471.6	471.6	464.1	467.1	465.6	467.8	469.3	469.3	470.1	468.6
32.5°	452.2	447.8	447.0	446.3	446.3	443.3	443.3	445.5	446.3	447.0	449.3
35°	428.4	428.4	424.7	426.9	424.0	424.7	424.0	424.7	426.2	424.0	426.2
37.5°	406.9	407.6	406.1	407.6	408.3	406.9	405.4	408.3	406.9	406.9	405.4
40°	388.3	387.5	388.3	388.3	388.3	389.0	387.5	387.5	387.5	386.0	384.5
42.5°	372.6	368.2	369.7	370.4	368.2	368.2	368.9	368.2	370.4	365.9	365.9
45°	350.3	348.8	349.6	349.6	351.1	348.8	350.3	351.1	348.8	348.1	346.6
47.5°	330.2	331.7	330.2	331.7	331.7	333.2	330.2	331.0	331.7	328.8	326.5
50°	310.2	310.2	312.4	311.7	312.4	310.9	310.9	310.2	310.9	309.4	307.2
52.5°	291.6	289.3	293.1	292.3	291.6	290.8	290.1	290.8	289.3	287.8	287.8
55°	268.5	268.5	270.7	271.5	271.5	270.0	268.5	269.3	268.5	267.8	267.0
57.5°	249.9	246.9	248.4	249.2	249.2	246.9	248.4	246.9	246.9	247.7	245.5
60°	226.1	226.1	224.6	226.9	226.9	225.4	225.4	226.1	224.6	223.9	223.1
62.5°	200.8	201.6	203.8	204.5	205.3	203.8	202.3	203.1	203.1	200.8	201.6
65°	179.3	180.7	183.7	183.0	181.5	182.2	180.7	181.5	179.3	180.0	177.8
67.5°	158.4	157.7	158.4	158.4	159.9	159.2	157.7	157.7	156.9	159.2	156.9
70°	136.1	136.1	136.1	136.1	136.9	137.6	136.1	134.6	135.4	133.9	133.1
72.5°	113.1	113.8	113.1	114.5	112.3	113.8	113.8	113.1	112.3	112.3	112.3
75°	91.5	93.0	90.7	91.5	90.7	92.2	91.5	91.5	90.0	89.3	90.0
77.5°	69.9	70.7	69.2	69.9	69.2	69.9	69.9	69.2	69.2	69.2	69.2
80°	49.8	50.6	49.8	49.1	48.3	49.8	48.3	49.1	49.8	49.1	50.6
82.5°	32.0	32.0	31.2	32.0	30.5	30.5	31.2	31.2	30.5	32.0	30.5
85°	15.6	15.6	17.1	15.6	14.9	14.9	14.9	15.6	14.9	16.4	15.6
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

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CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7	967.7
2.5°	918.6	924.5	922.3	914.1	923.8	923.8	930.5	930.5	938.7	941.6	946.1
5°	866.5	871.0	874.7	871.0	877.7	888.1	894.0	899.3	910.4	914.9	921.6
7.5°	810.7	818.9	822.6	822.6	833.8	845.7	857.6	865.0	880.7	886.6	893.3
10°	756.4	766.1	773.6	772.8	791.4	798.8	813.7	830.8	846.4	855.4	865.0
12.5°	699.2	704.4	714.8	729.7	734.1	747.5	764.6	786.2	814.5	822.6	836.8
15°	651.6	665.7	673.9	680.6	691.0	703.6	722.2	743.1	771.3	789.2	804.0
17.5°	611.4	630.0	635.2	633.7	647.1	666.4	688.0	703.6	728.9	750.5	764.6
20°	578.7	586.1	595.0	598.8	609.2	630.0	650.8	668.7	689.5	706.6	723.0
22.5°	545.9	551.9	559.3	566.0	574.2	586.1	606.2	628.5	648.6	665.0	683.6
25°	519.2	522.9	529.6	534.8	543.7	551.9	566.0	590.6	614.4	624.0	640.4
27.5°	493.1	496.1	500.6	506.5	511.0	519.2	531.8	551.9	576.4	586.1	608.4
30°	470.1	472.3	476.8	479.7	482.0	491.7	501.3	516.9	535.5	548.9	565.3
32.5°	448.5	450.7	455.2	455.9	458.9	464.1	473.1	487.2	503.6	514.7	528.8
35°	424.7	426.2	430.7	432.1	434.4	438.8	445.5	455.9	470.8	479.0	491.7
37.5°	406.1	405.4	408.3	410.6	413.6	415.8	418.0	428.4	439.6	447.0	456.7
40°	386.0	384.5	385.3	388.3	389.8	392.7	392.7	403.1	410.6	416.5	424.0
42.5°	365.9	365.2	363.7	365.2	366.7	367.4	368.2	375.6	383.1	388.3	396.4
45°	345.9	345.1	343.6	344.4	344.4	345.9	348.1	351.1	356.3	360.7	365.2
47.5°	327.3	325.8	323.6	322.8	324.3	324.3	324.3	327.3	332.5	334.0	338.4
50°	307.9	305.7	302.7	301.2	301.2	300.5	302.0	302.7	307.2	308.7	312.4
52.5°	287.1	285.6	282.6	279.7	280.4	278.9	279.7	280.4	281.9	284.1	286.4
55°	266.3	263.3	261.1	260.3	258.1	258.1	255.9	258.8	258.1	258.8	261.8
57.5°	246.2	243.2	239.5	238.0	235.8	235.0	233.6	232.8	233.6	235.8	238.0
60°	222.4	220.9	218.7	216.4	215.0	212.7	211.2	211.2	210.5	210.5	211.2
62.5°	199.3	198.6	195.6	194.9	193.4	191.9	189.7	188.2	188.2	189.7	190.4
65°	177.0	176.3	174.0	173.3	169.6	168.1	167.4	166.6	165.1	165.1	165.1
67.5°	156.2	154.0	154.0	150.2	147.3	145.8	144.3	143.6	143.6	143.6	144.3
70°	133.1	133.1	130.9	128.7	125.7	126.4	124.2	122.0	122.0	120.5	121.2
72.5°	110.8	110.1	107.9	107.1	104.9	102.6	101.2	102.6	100.4	99.7	100.4
75°	89.3	88.5	87.0	85.5	86.3	84.0	81.8	81.1	81.1	79.6	79.6
77.5°	68.4	69.9	66.9	66.2	64.7	63.2	62.5	61.7	61.7	61.7	63.2
80°	47.6	48.3	48.3	46.9	47.6	45.4	45.4	45.4	43.1	43.9	44.6
82.5°	30.5	30.5	29.8	30.5	29.8	29.8	29.0	29.0	28.3	28.3	29.0
85°	17.1	16.4	15.6	17.1	16.4	16.4	15.6	15.6	15.6	15.6	15.6
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: P997598

CATALOG NUMBER: SA2XXDP-B485DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	967.7	967.7	967.7	967.7
2.5°	949.8	949.8	961.0	972.9
5°	929.0	934.2	952.1	968.4
7.5°	908.9	917.8	940.2	961.0
10°	884.4	896.3	923.8	948.3
12.5°	860.6	871.7	903.7	931.2
15°	827.1	841.2	875.5	909.7
17.5°	793.6	807.8	849.4	889.6
20°	754.2	772.8	819.7	873.2
22.5°	717.8	740.8	792.9	836.0
25°	677.6	713.3	761.6	817.4
27.5°	641.9	677.6	726.7	783.2
30°	601.7	638.2	688.8	740.8
32.5°	563.1	596.5	645.6	709.6
35°	522.9	554.9	602.5	667.2
37.5°	486.4	517.7	569.7	629.3
40°	450.7	483.5	528.1	587.6
42.5°	417.3	446.3	486.4	545.9
45°	386.8	407.6	444.8	500.6
47.5°	354.8	373.4	407.6	463.4
50°	325.0	340.7	370.4	422.5
52.5°	296.0	309.4	336.9	378.6
55°	270.0	282.6	302.7	343.6
57.5°	243.2	252.9	272.2	305.0
60°	217.2	226.1	241.7	268.5
62.5°	191.2	198.6	213.5	235.0
65°	168.1	174.0	185.2	203.8
67.5°	145.8	149.5	158.4	173.3
70°	124.2	127.2	134.6	146.5
72.5°	101.2	104.1	112.3	120.5
75°	81.8	82.6	88.5	95.2
77.5°	64.0	63.2	67.7	72.9
80°	43.9	46.1	49.8	52.1
82.5°	29.8	30.5	32.0	33.5
85°	16.4	17.1	17.1	19.3
87.5°	6.7	7.4	7.4	8.2
90°	0.0	0.0	0.0	0.0

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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	21.45	22.97	21.82	23.28	23.60	17.72	19.24	18.09	19.55	19.87
	3H	22.57	23.93	22.95	24.26	24.62	19.13	20.50	19.51	20.82	21.18
	4H	22.89	24.17	23.29	24.52	24.90	19.64	20.92	20.04	21.27	21.64
	6H	23.08	24.26	23.49	24.63	25.02	20.00	21.18	20.41	21.54	21.94
	8H	23.12	24.25	23.55	24.64	25.04	20.11	21.23	20.54	21.62	22.02
	12H	23.14	24.21	23.57	24.59	25.02	20.18	21.26	20.62	21.64	22.07
4H	2H	21.57	22.85	21.97	23.20	23.58	18.52	19.79	18.92	20.14	20.52
	3H	22.90	23.96	23.31	24.36	24.76	20.09	21.15	20.50	21.55	21.96
	4H	23.38	24.33	23.81	24.75	25.19	20.69	21.65	21.13	22.06	22.50
	6H	23.71	24.54	24.16	24.98	25.44	21.15	21.98	21.60	22.42	22.88
	8H	23.78	24.56	24.25	25.00	25.47	21.29	22.07	21.75	22.51	22.98
	12H	23.82	24.52	24.31	25.00	25.47	21.40	22.09	21.88	22.57	23.04
8H	4H	23.46	24.24	23.92	24.68	25.15	21.10	21.88	21.56	22.32	22.79
	6H	23.87	24.51	24.37	25.00	25.48	21.64	22.28	22.14	22.78	23.25
	8H	24.00	24.57	24.51	25.08	25.57	21.84	22.42	22.36	22.93	23.41
	12H	24.09	24.59	24.60	25.09	25.65	22.01	22.51	22.52	23.01	23.57
12H	4H	23.45	24.14	23.93	24.62	25.09	21.16	21.85	21.64	22.33	22.80
	6H	23.86	24.44	24.38	24.95	25.43	21.72	22.29	22.23	22.80	23.29
	8H	24.03	24.54	24.54	25.03	25.59	21.97	22.47	22.48	22.97	23.53