

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: CORELITE

Report Number: P1191360

Luminaire Tested: SQ2-FA-125U-100D-L835-UNV-STD-W-4

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191360
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2502-345-2)
Test Lab: INNOVATION CENTER
Issue Date: 9/23/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-FA-125U-100D-L835-UNV-STD-W-4
Description: CORELITE SQ2 LED LUMINAIRE
FROSTED CONTINUOUS ASYMMETRIC ROLL LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

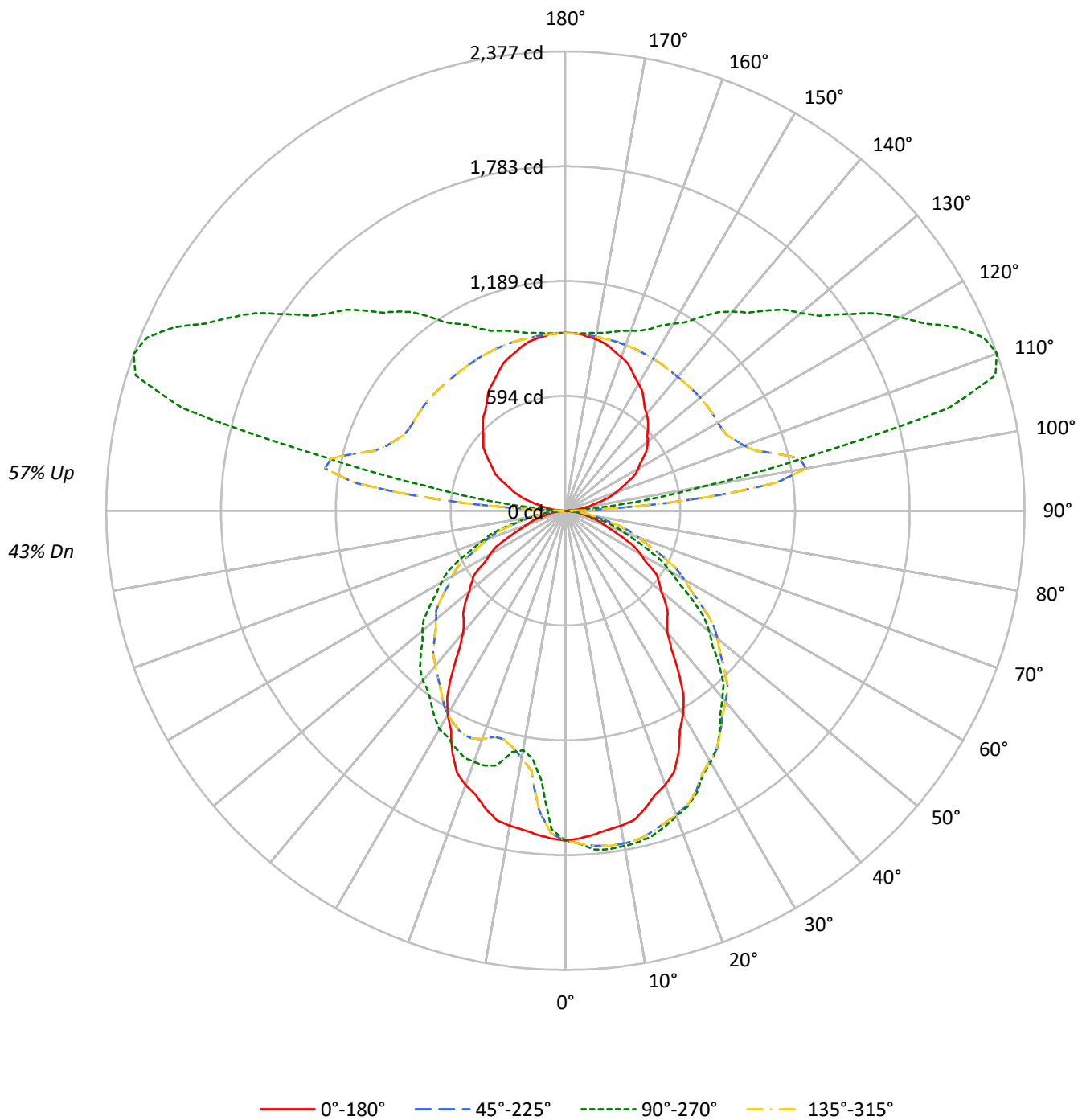
Lumens per Lamp: N/A
Luminaire Lumens: 9920.1 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 81.5
Input Voltage (V): 120
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	30	10
RCR																	
0	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42
2	88	80	74	69	80	74	69	64	61	57	54	49	47	45	39	37	35
3	80	71	63	58	73	65	59	54	54	49	45	44	40	38	34	32	30
4	73	62	55	49	67	57	51	45	48	43	39	39	35	32	31	28	26
5	67	56	48	42	61	51	44	39	43	37	33	35	31	28	28	25	23
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	25	22	20
7	57	45	37	32	52	41	34	30	35	29	25	29	25	22	23	20	18
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	21	18	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	27587	27587	27587	27587
5°	27263	28550	27263	22754
10°	27143	28880	27143	20628
15°	26678	29113	26678	22803
20°	25943	28902	25943	23782
25°	24658	28668	24658	24068
30°	22717	28027	22717	24322
35°	20101	27411	20101	23887
40°	17308	26660	17308	24148
45°	17086	25706	17086	24195
50°	16302	24453	16302	24287
55°	16217	22556	16217	24048
60°	14541	20102	14541	23951
65°	12397	17712	12397	23278
70°	10003	15007	10003	21569
75°	8677	12395	8677	19831
80°	7392	9233	7392	16011
85°	4909	4909	4909	9818

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 26613 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.7	1.5
10°-20°	429.6	4.3
20°-30°	652.4	6.6
30°-40°	765.8	7.7
40°-50°	777.1	7.8
50°-60°	680.8	6.9
60°-70°	483.0	4.9
70°-80°	248.7	2.5
80°-90°	53.2	0.5
90°-100°	351.9	3.5
100°-110°	1145.7	11.5
110°-120°	1133.3	11.4
120°-130°	926.1	9.3
130°-140°	756.9	7.6
140°-150°	589.6	5.9
150°-160°	425.0	4.3
160°-170°	259.7	2.6
170°-180°	87.6	0.9
0°-30°	1235.7	12.5
0°-40°	2001.5	20.2
0°-60°	3459.5	34.9
0°-90°	4244.3	42.8
90°-120°	2630.9	26.5
90°-150°	4903.5	49.4
90°-180°	5676.0	57.2
0°-180°	9920.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1709	1709	1709	1709	1709	
5°	1682	1762	1682	1404	1682	160
15°	1596	1742	1596	1364	1596	448
25°	1384	1609	1384	1351	1384	632
35°	1020	1391	1020	1212	1020	635
45°	748	1126	748	1060	748	572
55°	576	801	576	854	576	498
65°	324	464	324	609	324	324
75°	139	199	139	318	139	150
85°	26	26	26	53	26	33
90°	0	7	0	7	0	3
95°	48	141	48	141	48	55
105°	195	2053	195	2053	195	208
115°	360	2242	360	2242	360	356
125°	500	1773	500	1773	500	445
135°	604	1464	604	1464	604	467
145°	706	1224	706	1224	706	442
155°	806	1039	806	1039	806	371
165°	879	958	879	958	879	248
175°	916	921	916	921	916	87
180°	920	920	920	920	920	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1708.6	1708.6	1708.6	1708.6	1708.6	1708.6	1708.6	1708.6	1708.6	1708.6	1708.6
2.5°	1698.0	1723.9	1724.5	1724.5	1724.5	1724.5	1724.5	1723.9	1698.0	1698.0	1671.5
5°	1682.1	1727.4	1741.7	1748.6	1761.5	1748.6	1741.7	1727.4	1682.1	1662.6	1556.2
7.5°	1666.2	1727.0	1748.3	1760.4	1766.8	1760.4	1748.3	1727.0	1666.2	1579.4	1356.3
10°	1655.6	1726.8	1748.3	1755.1	1761.5	1755.1	1748.3	1726.8	1655.6	1480.8	1298.0
12.5°	1639.7	1716.1	1743.0	1749.8	1756.2	1749.8	1743.0	1716.1	1639.7	1392.3	1255.6
15°	1596.0	1699.6	1721.8	1735.2	1741.7	1735.2	1721.8	1699.6	1596.0	1317.6	1225.1
17.5°	1541.7	1667.3	1696.6	1708.7	1713.9	1708.7	1696.6	1667.3	1541.7	1250.3	1226.5
20°	1509.9	1645.9	1675.5	1682.1	1682.1	1682.1	1675.5	1645.9	1509.9	1218.5	1258.2
22.5°	1467.5	1619.0	1649.0	1650.4	1655.6	1650.4	1649.0	1619.0	1467.5	1181.3	1274.1
25°	1384.1	1558.9	1602.6	1596.3	1609.2	1596.3	1602.6	1558.9	1384.1	1131.5	1271.5
27.5°	1282.1	1502.2	1533.7	1540.4	1540.4	1540.4	1533.7	1502.2	1282.1	1082.6	1245.0
30°	1218.5	1464.6	1496.6	1503.3	1503.3	1503.3	1496.6	1464.6	1218.5	1050.2	1218.5
32.5°	1139.0	1431.7	1459.6	1460.9	1460.9	1460.9	1459.6	1431.7	1139.0	1017.3	1176.1
35°	1019.8	1376.0	1397.3	1397.2	1390.7	1397.2	1397.3	1376.0	1019.8	968.0	1125.8
37.5°	900.6	1304.7	1333.7	1324.3	1317.8	1324.3	1333.7	1304.7	900.6	917.5	1083.4
40°	821.2	1261.5	1291.4	1271.3	1264.9	1271.3	1291.4	1261.5	821.2	879.4	1046.3
42.5°	778.8	1213.9	1243.7	1218.4	1211.9	1218.4	1243.7	1213.9	778.8	842.2	1014.5
45°	748.3	1136.8	1165.5	1138.7	1125.8	1138.7	1165.5	1136.8	748.3	787.2	960.2
47.5°	702.0	1043.9	1084.7	1044.7	1031.8	1044.7	1084.7	1043.9	702.0	730.5	911.2
50°	649.0	985.7	1026.5	986.4	973.5	986.4	1026.5	985.7	649.0	687.8	874.1
52.5°	611.9	927.9	962.9	917.6	904.6	917.6	962.9	927.9	611.9	635.2	842.4
55°	576.1	841.6	867.5	820.7	801.3	820.7	867.5	841.6	576.1	556.7	781.4
57.5°	492.7	745.2	772.2	718.7	696.7	718.7	772.2	745.2	492.7	475.9	717.9
60°	450.3	676.9	708.6	654.9	622.5	654.9	708.6	676.9	450.3	417.9	675.5
62.5°	402.6	603.4	645.0	591.3	558.9	591.3	645.0	603.4	402.6	380.6	627.8
65°	324.5	499.3	549.7	495.9	463.6	495.9	549.7	499.3	324.5	337.4	549.7
67.5°	254.3	404.5	460.9	402.0	376.1	402.0	460.9	404.5	254.3	297.0	478.1
70°	211.9	341.4	397.3	343.8	317.9	343.8	397.3	341.4	211.9	270.2	430.5
72.5°	185.4	283.8	344.4	285.6	264.9	285.6	344.4	283.8	185.4	243.7	372.2
75°	139.1	197.3	264.9	211.6	198.7	211.6	264.9	197.3	139.1	197.3	291.4
77.5°	100.7	127.9	186.7	141.6	136.4	141.6	186.7	127.9	100.7	148.6	211.9
80°	79.5	85.9	139.1	99.3	99.3	99.3	139.1	85.9	79.5	111.8	158.9
82.5°	53.0	59.5	96.7	67.4	62.2	67.4	96.7	59.5	53.0	80.2	111.3
85°	26.5	26.5	39.7	26.5	26.5	26.5	39.7	26.5	26.5	39.4	53.0
87.5°	5.3	6.0	12.2	6.7	6.7	6.7	12.2	6.0	5.3	11.1	12.2
90°	0.0	3.3	7.9	6.8	6.8	6.8	7.9	3.3	0.0	3.3	7.9
92.5°	16.3	58.6	187.2	61.7	47.5	61.7	187.2	58.6	16.3	58.6	187.2
95°	47.5	144.9	645.0	230.0	141.4	230.0	645.0	144.9	47.5	144.9	645.0
97.5°	89.4	188.5	1094.6	666.7	406.9	666.7	1094.6	188.5	89.4	188.5	1094.6
100°	116.5	213.9	1263.9	1127.1	731.0	1127.1	1263.9	213.9	116.5	213.9	1263.9
102.5°	147.3	241.1	1243.1	1667.4	1267.8	1667.4	1243.1	241.1	147.3	241.1	1243.1
105°	194.6	280.9	1134.9	2167.7	2052.6	2167.7	1134.9	280.9	194.6	280.9	1134.9
107.5°	245.8	327.0	1032.2	2211.1	2333.0	2211.1	1032.2	327.0	245.8	327.0	1032.2
110°	282.9	357.0	983.3	2157.2	2377.4	2157.2	983.3	357.0	282.9	357.0	983.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	313.7	386.9	952.5	2060.0	2343.9	2060.0	952.5	386.9	313.7	386.9	952.5
115°	359.8	429.5	924.5	1905.2	2241.6	1905.2	924.5	429.5	359.8	429.5	924.5
117.5°	407.4	470.2	913.6	1763.5	2098.3	1763.5	913.6	470.2	407.4	470.2	913.6
120°	434.5	496.5	910.9	1676.4	2000.6	1676.4	910.9	496.5	434.5	496.5	910.9
122.5°	460.8	521.8	911.8	1600.7	1902.8	1600.7	911.8	521.8	460.8	521.8	911.8
125°	500.1	557.7	912.0	1504.3	1773.1	1504.3	912.0	557.7	500.1	557.7	912.0
127.5°	533.9	592.7	911.8	1432.0	1656.1	1432.0	911.8	592.7	533.9	592.7	911.8
130°	555.6	615.3	910.9	1390.7	1590.9	1390.7	910.9	615.3	555.6	615.3	910.9
132.5°	574.6	637.0	910.0	1352.4	1540.2	1352.4	910.0	637.0	574.6	637.0	910.0
135°	604.2	667.3	907.5	1298.2	1464.2	1298.2	907.5	667.3	604.2	667.3	907.5
137.5°	633.2	696.7	905.0	1243.3	1390.7	1243.3	905.0	696.7	633.2	696.7	905.0
140°	654.0	714.9	904.1	1206.0	1345.4	1206.0	904.1	714.9	654.0	714.9	904.1
142.5°	673.9	732.1	904.1	1170.3	1294.7	1170.3	904.1	732.1	673.9	732.1	904.1
145°	706.1	758.1	905.2	1118.1	1224.3	1118.1	905.2	758.1	706.1	758.1	905.2
147.5°	737.3	782.4	906.8	1073.7	1155.7	1073.7	906.8	782.4	737.3	782.4	906.8
150°	758.1	798.0	908.6	1047.1	1116.8	1047.1	908.6	798.0	758.1	798.0	908.6
152.5°	778.9	811.7	909.5	1026.9	1082.4	1026.9	909.5	811.7	778.9	811.7	909.5
155°	805.7	832.2	910.9	1001.1	1038.7	1001.1	910.9	832.2	805.7	832.2	910.9
157.5°	831.0	850.0	912.2	982.1	1008.4	982.1	912.2	850.0	831.0	850.0	912.2
160°	846.4	861.9	913.1	970.2	991.2	970.2	913.1	861.9	846.4	861.9	913.1
162.5°	860.0	871.9	913.1	960.1	975.8	960.1	913.1	871.9	860.0	871.9	913.1
165°	879.2	886.9	913.1	947.3	958.4	947.3	913.1	886.9	879.2	886.9	913.1
167.5°	892.8	897.6	913.4	937.7	943.5	937.7	913.4	897.6	892.8	897.6	913.4
170°	901.8	904.0	914.3	931.3	933.5	931.3	914.3	904.0	901.8	904.0	914.3
172.5°	908.2	909.5	916.1	927.6	927.2	927.6	916.1	909.5	908.2	909.5	916.1
175°	916.5	916.5	916.5	923.3	921.1	923.3	916.5	916.5	916.5	916.5	916.5
177.5°	919.9	919.1	918.1	922.6	919.0	922.6	918.1	919.1	919.9	919.1	918.1
180°	919.9	919.9	919.9	919.9	919.9	919.9	919.9	919.9	919.9	919.9	919.9

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1708.6	1708.6	1708.6	1708.6	1708.6	1708.6
2.5°	1655.5	1650.3	1655.5	1671.5	1698.0	1698.0
5°	1436.3	1403.9	1436.3	1556.2	1662.6	1682.1
7.5°	1305.7	1295.3	1305.7	1356.3	1579.4	1666.2
10°	1258.2	1258.2	1258.2	1298.0	1480.8	1655.6
12.5°	1253.5	1279.4	1253.5	1255.6	1392.3	1639.7
15°	1331.8	1364.2	1331.8	1225.1	1317.6	1596.0
17.5°	1358.2	1384.1	1358.2	1226.5	1250.3	1541.7
20°	1358.2	1384.1	1358.2	1258.2	1218.5	1509.9
22.5°	1352.9	1378.8	1352.9	1274.1	1181.3	1467.5
25°	1338.0	1351.0	1338.0	1271.5	1131.5	1384.1
27.5°	1311.4	1320.5	1311.4	1245.0	1082.6	1282.1
30°	1285.2	1304.6	1285.2	1218.5	1050.2	1218.5
32.5°	1258.3	1262.2	1258.3	1176.1	1017.3	1139.0
35°	1218.4	1211.9	1218.4	1125.8	968.0	1019.8
37.5°	1164.4	1172.2	1164.4	1083.4	917.5	900.6
40°	1132.7	1145.7	1132.7	1046.3	879.4	821.2
42.5°	1100.9	1113.9	1100.9	1014.5	842.2	778.8
45°	1053.1	1059.6	1053.1	960.2	787.2	748.3
47.5°	997.5	1003.9	997.5	911.2	730.5	702.0
50°	960.4	966.9	960.4	874.1	687.8	649.0
52.5°	918.0	924.5	918.0	842.4	635.2	611.9
55°	854.3	854.3	854.3	781.4	556.7	576.1
57.5°	781.6	789.4	781.6	717.9	475.9	492.7
60°	728.8	741.7	728.8	675.5	417.9	450.3
62.5°	681.0	688.7	681.0	627.8	380.6	402.6
65°	602.8	609.3	602.8	549.7	337.4	324.5
67.5°	515.3	520.5	515.3	478.1	297.0	254.3
70°	456.9	456.9	456.9	430.5	270.2	211.9
72.5°	398.8	404.0	398.8	372.2	243.7	185.4
75°	311.4	317.9	311.4	291.4	197.3	139.1
77.5°	224.0	230.5	224.0	211.9	148.6	100.7
80°	165.7	172.2	165.7	158.9	111.8	79.5
82.5°	117.9	119.2	117.9	111.3	80.2	53.0
85°	53.0	53.0	53.0	53.0	39.4	26.5
87.5°	12.0	12.0	12.0	12.2	11.1	5.3
90°	6.8	6.8	6.8	7.9	3.3	0.0
92.5°	61.7	47.5	61.7	187.2	58.6	16.3
95°	230.0	141.4	230.0	645.0	144.9	47.5
97.5°	666.7	406.9	666.7	1094.6	188.5	89.4
100°	1127.1	731.0	1127.1	1263.9	213.9	116.5
102.5°	1667.4	1267.8	1667.4	1243.1	241.1	147.3
105°	2167.7	2052.6	2167.7	1134.9	280.9	194.6
107.5°	2211.1	2333.0	2211.1	1032.2	327.0	245.8
110°	2157.2	2377.4	2157.2	983.3	357.0	282.9

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2060.0	2343.9	2060.0	952.5	386.9	313.7
115°	1905.2	2241.6	1905.2	924.5	429.5	359.8
117.5°	1763.5	2098.3	1763.5	913.6	470.2	407.4
120°	1676.4	2000.6	1676.4	910.9	496.5	434.5
122.5°	1600.7	1902.8	1600.7	911.8	521.8	460.8
125°	1504.3	1773.1	1504.3	912.0	557.7	500.1
127.5°	1432.0	1656.1	1432.0	911.8	592.7	533.9
130°	1390.7	1590.9	1390.7	910.9	615.3	555.6
132.5°	1352.4	1540.2	1352.4	910.0	637.0	574.6
135°	1298.2	1464.2	1298.2	907.5	667.3	604.2
137.5°	1243.3	1390.7	1243.3	905.0	696.7	633.2
140°	1206.0	1345.4	1206.0	904.1	714.9	654.0
142.5°	1170.3	1294.7	1170.3	904.1	732.1	673.9
145°	1118.1	1224.3	1118.1	905.2	758.1	706.1
147.5°	1073.7	1155.7	1073.7	906.8	782.4	737.3
150°	1047.1	1116.8	1047.1	908.6	798.0	758.1
152.5°	1026.9	1082.4	1026.9	909.5	811.7	778.9
155°	1001.1	1038.7	1001.1	910.9	832.2	805.7
157.5°	982.1	1008.4	982.1	912.2	850.0	831.0
160°	970.2	991.2	970.2	913.1	861.9	846.4
162.5°	960.1	975.8	960.1	913.1	871.9	860.0
165°	947.3	958.4	947.3	913.1	886.9	879.2
167.5°	937.7	943.5	937.7	913.4	897.6	892.8
170°	931.3	933.5	931.3	914.3	904.0	901.8
172.5°	927.6	927.2	927.6	916.1	909.5	908.2
175°	923.3	921.1	923.3	916.5	916.5	916.5
177.5°	922.6	919.0	922.6	918.1	919.1	919.9
180°	919.9	919.9	919.9	919.9	919.9	919.9

TEST NUMBER: P1191360

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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	17.17	17.97	18.19	19.00	20.37	18.40	19.20	19.41	20.22	21.59
	3H	18.26	18.97	19.28	20.01	21.40	19.63	20.35	20.66	21.38	22.78
	4H	18.61	19.28	19.65	20.32	21.72	20.02	20.70	21.06	21.74	23.13
	6H	18.77	19.39	19.82	20.43	21.84	20.18	20.80	21.23	21.84	23.25
	8H	18.80	19.39	19.85	20.45	21.86	20.20	20.79	21.26	21.85	23.26
	12H	18.79	19.36	19.85	20.41	21.84	20.18	20.75	21.24	21.80	23.23
4H	2H	18.09	18.77	19.14	19.81	21.20	19.00	19.68	20.05	20.72	22.12
	3H	19.45	20.02	20.51	21.08	22.49	20.45	21.01	21.50	22.08	23.49
	4H	19.90	20.41	20.96	21.47	22.90	20.91	21.43	21.97	22.49	23.92
	6H	20.12	20.56	21.19	21.64	23.07	21.13	21.57	22.20	22.65	24.08
	8H	20.18	20.59	21.25	21.66	23.11	21.18	21.59	22.25	22.66	24.11
	12H	20.17	20.55	21.26	21.63	23.08	21.16	21.54	22.25	22.62	24.07
8H	4H	20.29	20.70	21.36	21.78	23.22	21.12	21.53	22.19	22.60	24.05
	6H	20.63	20.97	21.73	22.09	23.53	21.42	21.77	22.52	22.88	24.32
	8H	20.75	21.05	21.85	22.14	23.61	21.52	21.82	22.62	22.91	24.38
	12H	20.78	21.04	21.89	22.14	23.64	21.53	21.79	22.63	22.88	24.38
12H	4H	20.29	20.67	21.38	21.75	23.20	21.08	21.46	22.17	22.54	23.99
	6H	20.71	21.01	21.81	22.10	23.56	21.45	21.75	22.55	22.84	24.30
	8H	20.85	21.11	21.95	22.20	23.70	21.55	21.82	22.66	22.91	24.41