

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: P938176

Luminaire Tested: SQ4-FB-125U-125D-940-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938176
REPORT IS A COMBINATION OF REPORTS P933616 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-125D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

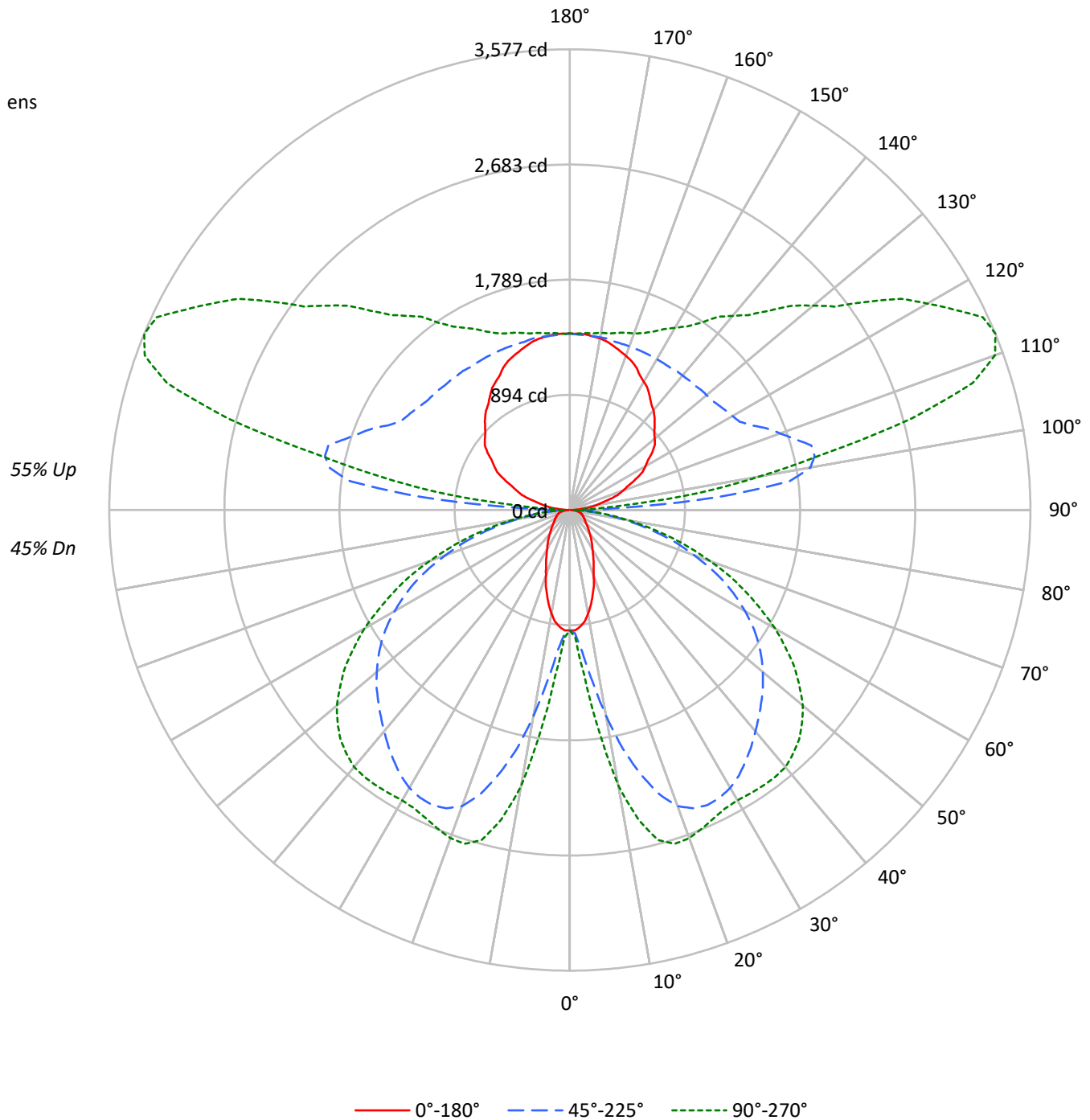
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16118.1 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 150.4
Input Voltage (V): NR
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				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	50	30	10	0
RCR																					
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42	37	37	37	37
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18	18	18	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13	13	13	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4337	4337	4337
5°	4236	5013	5829
10°	3843	7307	9664
15°	3266	9546	11669
20°	2659	11062	11893
25°	2218	11576	11651
30°	1870	11649	11629
35°	1654	11456	11930
40°	1441	11204	12241
45°	1305	11020	12288
50°	1197	10854	12085
55°	1147	10612	11549
60°	1173	10145	10703
65°	1221	9437	9541
70°	1301	8230	8061
75°	1442	6711	6290
80°	1574	4654	4239
85°	1397	2470	2170

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12288 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.9	0.8
10°-20°	535.9	3.3
20°-30°	937.3	5.8
30°-40°	1206.6	7.5
40°-50°	1347.8	8.4
50°-60°	1290.8	8.0
60°-70°	1023.0	6.3
70°-80°	601.6	3.7
80°-90°	172.3	1.1
90°-100°	667.9	4.1
100°-110°	1755.8	10.9
110°-120°	1820.6	11.3
120°-130°	1460.4	9.1
130°-140°	1145.9	7.1
140°-150°	879.5	5.5
150°-160°	633.4	3.9
160°-170°	387.5	2.4
170°-180°	130.9	0.8
0°-30°	1594.1	9.9
0°-40°	2800.7	17.4
0°-60°	5439.3	33.7
0°-90°	7236.2	44.9
90°-120°	4244.3	26.3
90°-150°	7730.1	48.0
90°-180°	8882.0	55.1
0°-180°	16118.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	935	935	935	935	935	
5°	911	977	1100	1244	1289	84
15°	682	1259	2122	2573	2654	190
25°	436	1428	2528	2639	2642	201
35°	294	1364	2380	2516	2615	184
45°	201	1088	2104	2410	2519	156
55°	144	691	1785	2074	2131	131
65°	114	367	1325	1491	1512	113
75°	84	225	727	800	802	88
85°	30	69	180	198	201	32
90°	9	26	70	35	35	10
95°	88	346	1150	593	404	98
105°	316	479	1941	2947	2749	335
115°	562	682	1555	3102	3540	555
125°	782	876	1414	2390	2819	694
135°	932	1025	1370	1929	2188	721
145°	1080	1149	1353	1646	1775	677
155°	1221	1255	1353	1485	1528	561
165°	1318	1335	1353	1406	1424	372
175°	1370	1370	1362	1379	1379	130
180°	1370	1370	1370	1370	1370	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	934.7	934.7	934.7	934.7	934.7	934.7	934.7	934.7	934.7	934.7	934.7
2.5°	934.7	934.7	940.7	943.8	949.7	952.7	958.8	964.8	982.8	985.9	991.8
5°	910.6	922.7	961.8	976.8	1018.9	1076.0	1100.1	1139.1	1220.2	1244.3	1259.3
7.5°	874.6	901.7	997.8	1021.9	1127.0	1277.4	1340.4	1424.6	1553.8	1617.0	1668.1
10°	817.5	874.6	1045.9	1103.0	1274.4	1502.8	1620.0	1737.2	1932.6	2019.8	2052.8
12.5°	754.4	847.6	1097.0	1175.2	1421.6	1755.2	1896.5	2025.7	2248.1	2365.4	2383.4
15°	682.3	808.5	1145.1	1259.3	1577.9	1965.6	2121.9	2281.2	2488.6	2572.7	2593.8
17.5°	619.1	778.4	1190.2	1310.4	1698.1	2155.0	2314.2	2446.5	2614.8	2671.9	2686.9
20°	541.0	730.4	1220.2	1376.5	1824.4	2293.3	2446.5	2548.6	2662.9	2699.0	2704.9
22.5°	483.9	679.2	1238.3	1400.6	1908.5	2377.4	2506.6	2587.7	2665.9	2677.9	2681.0
25°	435.8	622.1	1235.3	1427.6	1980.7	2428.5	2527.7	2587.7	2632.8	2638.9	2638.9
27.5°	390.7	559.0	1223.2	1433.7	2034.8	2440.5	2518.6	2560.7	2581.8	2593.8	2593.8
30°	351.6	498.9	1193.2	1421.6	2058.8	2428.5	2491.6	2512.6	2533.6	2551.7	2560.7
32.5°	321.6	441.8	1148.1	1397.5	2061.8	2398.4	2443.5	2455.5	2485.6	2527.7	2542.7
35°	294.5	384.7	1097.0	1364.5	2043.7	2350.4	2380.4	2392.4	2452.5	2515.6	2536.7
37.5°	267.5	342.6	1030.9	1307.4	2016.7	2293.3	2314.2	2335.3	2428.5	2503.6	2527.7
40°	240.5	306.5	952.7	1244.3	1974.6	2224.1	2242.1	2275.1	2398.4	2485.6	2509.6
42.5°	219.4	276.5	868.6	1178.2	1920.6	2145.9	2173.0	2221.1	2362.3	2455.5	2482.6
45°	201.4	246.4	778.4	1088.0	1851.4	2064.8	2103.8	2170.0	2320.3	2410.5	2434.5
47.5°	183.4	225.4	685.3	994.8	1776.3	1983.6	2034.8	2109.9	2263.2	2350.4	2371.4
50°	168.3	204.4	592.1	895.6	1695.1	1896.5	1956.6	2034.8	2191.1	2272.2	2299.2
52.5°	156.3	186.3	504.9	796.4	1602.0	1806.3	1875.5	1956.6	2103.8	2182.0	2200.0
55°	144.3	171.3	429.8	691.3	1505.8	1710.1	1785.3	1863.5	2007.7	2073.8	2085.8
57.5°	138.3	159.3	366.7	592.1	1403.6	1602.0	1686.1	1758.2	1893.5	1944.5	1956.6
60°	129.2	150.2	318.6	507.9	1292.4	1499.7	1571.8	1644.0	1758.2	1800.3	1809.3
62.5°	120.2	144.3	282.6	426.8	1178.2	1379.5	1451.7	1517.8	1613.9	1644.0	1656.0
65°	114.2	138.3	255.5	366.7	1061.0	1253.3	1325.4	1382.5	1460.7	1490.8	1496.7
67.5°	108.2	132.2	234.4	315.6	943.8	1127.0	1181.1	1235.3	1295.4	1325.4	1328.4
70°	99.2	126.3	216.4	279.5	823.5	982.8	1027.9	1085.0	1133.1	1148.1	1157.2
72.5°	93.2	117.2	204.4	252.5	700.3	844.6	886.7	919.7	961.8	976.8	976.8
75°	84.2	105.2	192.3	225.4	574.1	691.3	727.4	760.4	793.4	799.5	790.5
77.5°	75.1	93.2	165.3	189.3	447.8	547.0	577.0	595.1	622.1	628.2	631.2
80°	63.1	81.2	129.2	147.2	324.6	402.7	423.8	438.8	462.8	462.8	468.9
82.5°	48.1	63.1	93.2	105.2	219.4	276.5	294.5	303.5	318.6	318.6	318.6
85°	30.0	39.1	60.1	69.1	132.2	168.3	180.4	183.4	195.4	198.4	198.4
87.5°	15.0	21.0	39.1	42.1	69.1	87.2	87.2	93.2	93.2	90.1	87.2
90°	9.2	16.6	23.9	25.8	40.5	60.1	69.9	62.1	46.5	34.9	34.9
92.5°	36.8	99.3	161.9	177.5	249.5	345.5	393.6	344.9	247.7	174.7	167.7
95°	88.3	202.7	317.2	345.8	614.0	971.6	1150.3	1026.5	778.9	593.1	572.0
97.5°	152.6	253.6	354.6	379.8	827.0	1423.3	1721.4	1643.2	1486.6	1369.2	1329.2
100°	202.3	293.8	385.4	408.3	904.5	1566.2	1897.0	1902.7	1914.2	1922.8	1875.1
102.5°	244.6	330.0	415.4	436.8	940.1	1611.2	1946.7	2046.4	2245.8	2395.4	2354.5
105°	316.3	388.7	461.0	479.1	966.4	1616.2	1941.2	2164.7	2611.8	2947.1	2925.2
107.5°	389.9	457.3	524.7	541.6	971.3	1544.3	1830.8	2142.7	2766.3	3234.0	3239.3
110°	439.6	500.5	561.4	576.6	964.0	1480.6	1738.9	2087.5	2784.7	3307.5	3330.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	488.3	546.3	604.4	618.8	964.3	1424.9	1655.1	2011.9	2725.4	3260.6	3295.8
115°	561.8	615.4	668.8	682.3	973.2	1361.0	1555.0	1898.6	2586.0	3101.6	3150.4
117.5°	634.5	683.1	731.7	743.9	991.3	1321.1	1486.0	1796.2	2416.5	2881.8	2935.9
120°	676.7	722.6	768.3	779.8	1005.9	1307.6	1458.4	1741.8	2308.6	2733.8	2786.3
122.5°	718.1	764.3	810.5	822.0	1027.1	1300.5	1437.2	1692.4	2203.0	2585.8	2637.5
125°	781.6	823.7	865.8	876.3	1055.6	1294.7	1414.2	1631.1	2064.7	2389.9	2437.6
127.5°	833.1	875.7	918.1	928.8	1084.2	1291.3	1395.0	1581.1	1953.4	2232.6	2272.8
130°	860.6	906.5	952.2	963.7	1104.9	1293.4	1387.6	1553.3	1884.8	2133.3	2170.5
132.5°	889.2	935.0	980.7	992.2	1121.8	1294.7	1381.1	1529.5	1826.2	2048.7	2082.0
135°	931.5	973.2	1014.9	1025.3	1140.2	1293.5	1370.1	1494.3	1742.8	1929.2	1957.9
137.5°	974.7	1016.0	1057.3	1067.6	1167.8	1301.5	1368.2	1473.3	1683.4	1840.9	1864.4
140°	1010.5	1048.6	1086.6	1096.1	1184.7	1302.8	1361.8	1452.6	1634.0	1770.1	1792.1
142.5°	1038.2	1073.3	1108.4	1117.2	1198.7	1307.5	1361.8	1441.5	1600.9	1720.4	1739.3
145°	1080.4	1111.1	1141.8	1149.4	1217.2	1307.5	1352.6	1417.8	1548.2	1646.0	1660.3
147.5°	1122.8	1152.6	1182.5	1189.9	1244.2	1316.5	1352.6	1403.9	1506.5	1583.5	1595.3
150°	1150.3	1177.3	1204.3	1211.1	1258.2	1321.2	1352.6	1395.9	1482.6	1547.6	1557.2
152.5°	1178.8	1199.2	1219.7	1224.8	1267.4	1324.2	1352.6	1389.6	1463.6	1519.1	1526.4
155°	1221.2	1236.3	1251.4	1255.2	1287.7	1330.9	1352.6	1382.1	1441.0	1485.1	1489.9
157.5°	1252.4	1267.1	1281.8	1285.5	1307.8	1337.7	1352.6	1375.5	1421.2	1455.6	1459.0
160°	1273.6	1285.0	1296.5	1299.3	1317.1	1340.8	1352.6	1372.2	1411.5	1440.9	1442.8
162.5°	1294.7	1303.2	1311.8	1314.0	1326.8	1344.0	1352.6	1369.1	1402.2	1427.1	1429.0
165°	1317.7	1325.5	1333.2	1335.2	1341.0	1348.7	1352.6	1364.5	1388.2	1406.0	1407.9
167.5°	1338.8	1342.5	1346.2	1347.1	1352.0	1358.6	1361.8	1369.6	1385.1	1396.7	1397.5
170°	1352.6	1356.3	1360.1	1360.9	1361.2	1361.7	1361.8	1369.6	1385.1	1396.7	1396.7
172.5°	1360.0	1360.8	1361.7	1361.8	1361.8	1361.8	1361.8	1368.0	1380.2	1389.5	1388.7
175°	1370.1	1370.1	1370.1	1370.1	1367.3	1363.7	1361.8	1365.7	1373.5	1379.3	1379.3
177.5°	1370.1	1370.1	1370.1	1370.1	1368.0	1365.1	1363.7	1366.7	1372.8	1377.5	1376.7
180°	1370.1	1370.1	1370.1	1370.1	1370.1	1370.1	1370.1	1370.1	1370.1	1370.1	1370.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	934.7	934.7
2.5°	997.8	991.8
5°	1283.3	1289.4
7.5°	1728.1	1725.2
10°	2149.0	2176.0
12.5°	2455.5	2461.5
15°	2641.9	2653.9
17.5°	2714.0	2717.0
20°	2717.0	2711.0
22.5°	2684.0	2677.9
25°	2644.9	2641.9
27.5°	2608.8	2611.8
30°	2593.8	2602.8
32.5°	2593.8	2608.8
35°	2599.8	2614.8
37.5°	2596.8	2614.8
40°	2584.8	2605.8
42.5°	2551.7	2566.8
45°	2500.6	2518.6
47.5°	2434.5	2446.5
50°	2350.4	2362.3
52.5°	2245.1	2248.1
55°	2118.9	2130.9
57.5°	1983.6	1986.6
60°	1833.4	1842.4
62.5°	1674.1	1674.1
65°	1505.8	1511.8
67.5°	1331.5	1346.5
70°	1154.1	1157.2
72.5°	979.8	979.8
75°	799.5	802.5
77.5°	628.2	628.2
80°	465.8	468.9
82.5°	321.6	327.6
85°	201.4	201.4
87.5°	93.2	84.2
90°	34.9	34.9
92.5°	139.9	112.2
95°	487.9	403.7
97.5°	1169.0	1008.8
100°	1684.2	1493.3
102.5°	2191.1	2027.6
105°	2837.2	2749.4
107.5°	3260.6	3281.8
110°	3422.0	3513.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3436.4	3577.0
115°	3345.3	3540.2
117.5°	3152.0	3368.3
120°	2996.4	3206.4
122.5°	2844.8	3052.0
125°	2628.5	2819.3
127.5°	2433.9	2594.9
130°	2319.3	2468.0
132.5°	2215.3	2348.5
135°	2072.8	2187.6
137.5°	1958.4	2052.4
140°	1880.0	1967.8
142.5°	1814.9	1890.6
145°	1717.5	1774.7
147.5°	1642.7	1690.1
150°	1595.6	1634.0
152.5°	1555.3	1584.4
155°	1509.1	1528.2
157.5°	1472.5	1486.0
160°	1450.5	1458.4
162.5°	1436.3	1443.7
165°	1415.6	1423.5
167.5°	1400.8	1404.1
170°	1396.7	1396.7
172.5°	1385.8	1383.0
175°	1379.3	1379.3
177.5°	1373.4	1370.1
180°	1370.1	1370.1



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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	5.62	6.47	6.61	7.48	8.82	18.80	19.65	19.79	20.66	22.00
	3H	6.32	7.09	7.33	8.11	9.46	20.64	21.40	21.64	22.42	23.78
	4H	6.62	7.35	7.64	8.37	9.73	21.28	22.00	22.30	23.03	24.39
	6H	6.87	7.54	7.90	8.56	9.94	21.71	22.38	22.74	23.40	24.78
	8H	6.94	7.58	7.97	8.62	9.99	21.83	22.47	22.86	23.51	24.89
	12H	6.96	7.56	7.99	8.60	10.00	21.90	22.50	22.94	23.54	24.94
4H	2H	12.83	13.56	13.85	14.58	15.94	19.07	19.79	20.09	20.82	22.18
	3H	14.40	15.01	15.43	16.05	17.44	21.11	21.72	22.14	22.77	24.15
	4H	14.49	15.05	15.53	16.09	17.49	21.88	22.44	22.92	23.48	24.88
	6H	14.50	14.98	15.55	16.05	17.45	22.42	22.90	23.47	23.96	25.36
	8H	14.48	14.93	15.53	15.98	17.40	22.58	23.03	23.63	24.09	25.50
	12H	14.44	14.84	15.50	15.91	17.33	22.67	23.08	23.74	24.15	25.57
8H	4H	15.94	16.38	16.99	17.44	18.86	21.94	22.39	22.99	23.45	24.86
	6H	16.18	16.55	17.25	17.65	19.06	22.57	22.94	23.64	24.04	25.45
	8H	16.20	16.52	17.28	17.61	19.04	22.79	23.12	23.87	24.20	25.63
	12H	16.16	16.45	17.25	17.53	19.00	22.93	23.22	24.02	24.30	25.77
12H	4H	16.08	16.49	17.15	17.56	18.98	21.89	22.30	22.96	23.37	24.79
	6H	16.44	16.76	17.52	17.85	19.28	22.55	22.88	23.63	23.96	25.39
	8H	16.51	16.79	17.59	17.87	19.34	22.78	23.07	23.87	24.15	25.62