

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: P937880

Luminaire Tested: SQ4-FB-125U-050D-B2750-1D-UNV-W2A-W-12-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937880
REPORT IS A COMBINATION OF REPORTS P933589 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-B2750-1D-UNV-W2A-W-12-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

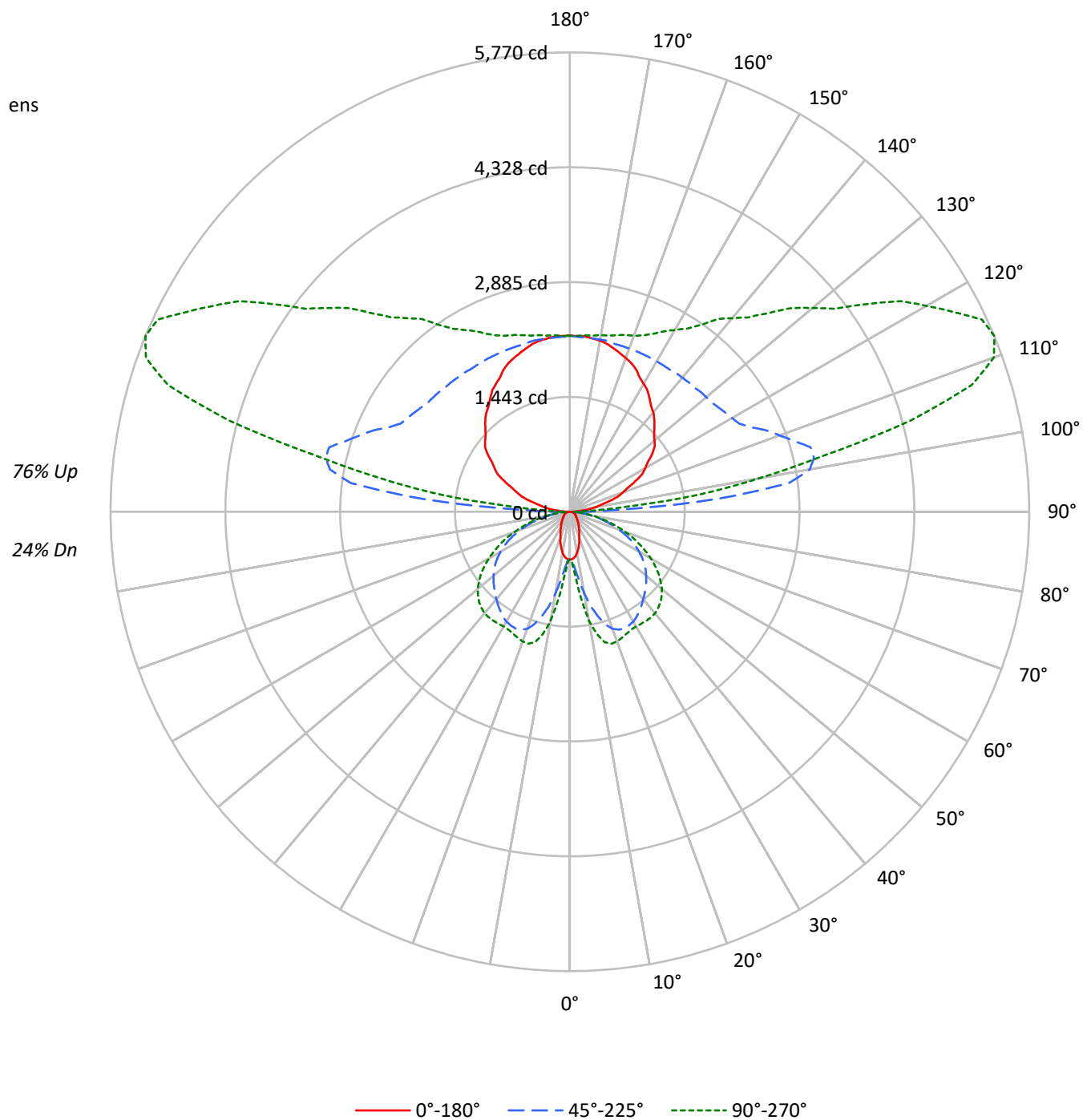
Lumens per Lamp: N/A
Luminaire Lumens: 18959.6 lumens
Efficiency: N/A
Efficacy: 132.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 142.8
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

TEST NUMBER: P937880

CATALOG NUMBER: SQ4-FB-125U-050D-B2750-1D-UNV-W2A-W-12-4000K

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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	22	20	19
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1848	1848	1848
5°	1807	2137	2485
10°	1639	3116	4119
15°	1394	4072	4974
20°	1135	4720	5069
25°	947	4940	4966
30°	799	4973	4957
35°	707	4891	5085
40°	617	4786	5217
45°	558	4708	5238
50°	513	4639	5151
55°	492	4537	4923
60°	504	4340	4562
65°	526	4039	4067
70°	561	3525	3436
75°	624	2876	2681
80°	687	1997	1807
85°	622	1062	924

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 5493 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.3	0.4
10°-20°	342.6	1.8
20°-30°	599.3	3.2
30°-40°	771.5	4.1
40°-50°	861.7	4.5
50°-60°	825.3	4.4
60°-70°	654.1	3.4
70°-80°	384.6	2.0
80°-90°	115.3	0.6
90°-100°	1077.4	5.7
100°-110°	2832.5	14.9
110°-120°	2937.0	15.5
120°-130°	2355.8	12.4
130°-140°	1848.5	9.7
140°-150°	1418.8	7.5
150°-160°	1021.8	5.4
160°-170°	625.2	3.3
170°-180°	211.2	1.1
0°-30°	1019.2	5.4
0°-40°	1790.7	9.4
0°-60°	3477.7	18.3
0°-90°	4631.6	24.4
90°-120°	6846.8	36.1
90°-150°	12469.9	65.8
90°-180°	14328.0	75.6
0°-180°	18959.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	582	624	703	796	824	54
15°	436	805	1357	1645	1697	121
25°	279	913	1616	1687	1689	128
35°	188	872	1522	1608	1672	118
45°	129	696	1345	1541	1610	100
55°	92	442	1141	1326	1362	84
65°	73	234	848	953	967	72
75°	54	144	465	511	513	56
85°	19	44	115	127	129	20
90°	15	42	113	56	56	13
95°	142	558	1856	957	651	158
105°	510	773	3131	4754	4435	541
115°	906	1101	2508	5003	5711	895
125°	1261	1414	2281	3855	4548	1119
135°	1503	1654	2210	3112	3529	1163
145°	1743	1854	2182	2655	2863	1092
155°	1970	2025	2182	2396	2465	905
165°	2126	2154	2182	2268	2296	600
175°	2210	2210	2197	2225	2225	210
180°	2210	2210	2210	2210	2210	

TEST NUMBER: P937880

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	597.6	597.6	597.6	597.6	597.6	597.6	597.6	597.6	597.6	597.6	597.6
2.5°	597.6	597.6	601.5	603.4	607.2	609.1	613.0	616.8	628.4	630.3	634.1
5°	582.3	589.9	614.9	624.5	651.4	687.9	703.3	728.3	780.1	795.5	805.2
7.5°	559.2	576.4	637.9	653.3	720.6	816.7	857.0	910.9	993.5	1033.8	1066.4
10°	522.7	559.2	668.7	705.3	814.7	960.8	1035.7	1110.7	1235.6	1291.4	1312.5
12.5°	482.3	541.9	701.4	751.3	908.9	1122.2	1212.6	1295.2	1437.4	1512.3	1523.8
15°	436.2	516.9	732.1	805.2	1008.9	1256.7	1356.7	1458.5	1591.1	1644.9	1658.4
17.5°	395.8	497.7	760.9	837.8	1085.7	1377.8	1479.6	1564.2	1671.8	1708.3	1717.9
20°	345.9	467.0	780.1	880.1	1166.4	1466.2	1564.2	1629.5	1702.6	1725.6	1729.4
22.5°	309.4	434.2	791.7	895.5	1220.2	1520.0	1602.6	1654.5	1704.5	1712.1	1714.0
25°	278.7	397.8	789.8	912.8	1266.3	1552.6	1616.1	1654.5	1683.3	1687.2	1687.2
27.5°	249.8	357.5	782.0	916.6	1300.9	1560.4	1610.3	1637.2	1650.6	1658.4	1658.4
30°	224.8	319.0	762.9	908.9	1316.3	1552.6	1593.0	1606.5	1619.9	1631.4	1637.2
32.5°	205.6	282.5	734.0	893.5	1318.2	1533.4	1562.3	1569.9	1589.1	1616.1	1625.7
35°	188.3	246.0	701.4	872.4	1306.7	1502.7	1521.9	1529.6	1568.0	1608.4	1621.8
37.5°	171.0	219.1	659.1	835.9	1289.3	1466.2	1479.6	1493.0	1552.6	1600.7	1616.1
40°	153.8	196.0	609.1	795.5	1262.5	1422.0	1433.6	1454.7	1533.4	1589.1	1604.5
42.5°	140.3	176.8	555.3	753.3	1227.9	1372.0	1389.3	1420.1	1510.3	1569.9	1587.2
45°	128.7	157.6	497.7	695.6	1183.7	1320.1	1345.1	1387.4	1483.5	1541.1	1556.5
47.5°	117.2	144.1	438.2	636.0	1135.7	1268.2	1300.9	1348.9	1446.9	1502.7	1516.2
50°	107.6	130.6	378.6	572.6	1083.7	1212.6	1251.0	1300.9	1400.9	1452.7	1470.0
52.5°	99.9	119.2	322.8	509.2	1024.2	1154.9	1199.1	1251.0	1345.1	1395.1	1406.6
55°	92.3	109.5	274.8	442.0	962.7	1093.4	1141.4	1191.4	1283.6	1325.9	1333.6
57.5°	88.4	101.8	234.5	378.6	897.4	1024.2	1078.0	1124.1	1210.6	1243.3	1251.0
60°	82.6	96.1	203.7	324.8	826.3	958.9	1005.0	1051.1	1124.1	1151.1	1156.8
62.5°	76.9	92.3	180.6	272.8	753.3	882.0	928.2	970.4	1031.9	1051.1	1058.8
65°	73.1	88.4	163.3	234.5	678.3	801.3	847.5	883.9	933.9	953.1	956.9
67.5°	69.1	84.5	149.8	201.8	603.4	720.6	755.2	789.8	828.2	847.5	849.4
70°	63.4	80.7	138.4	178.7	526.5	628.4	657.2	693.7	724.5	734.0	739.8
72.5°	59.6	75.0	130.6	161.4	447.7	540.0	566.9	588.0	614.9	624.5	624.5
75°	53.8	67.2	123.0	144.1	367.0	442.0	465.0	486.2	507.3	511.1	505.4
77.5°	48.0	59.6	105.7	121.1	286.3	349.7	368.9	380.5	397.8	401.6	403.5
80°	40.4	51.9	82.6	94.2	207.5	257.5	270.9	280.6	296.0	296.0	299.8
82.5°	30.8	40.4	59.6	67.2	140.3	176.8	188.3	194.1	203.7	203.7	203.7
85°	19.2	25.0	38.4	44.2	84.5	107.6	115.3	117.2	124.9	126.8	126.8
87.5°	9.6	13.5	25.0	26.9	44.2	55.8	55.8	59.6	59.6	57.7	55.8
90°	14.8	26.6	38.6	41.5	65.2	96.8	112.7	100.2	75.2	56.3	56.3
92.5°	59.3	160.2	261.1	286.3	402.5	557.4	634.9	556.4	399.5	281.8	270.6
95°	142.4	327.0	511.6	557.7	990.3	1567.3	1855.7	1655.9	1256.4	956.8	922.8
97.5°	246.2	409.0	571.9	612.6	1334.0	2295.9	2776.9	2650.6	2398.1	2208.7	2144.1
100°	326.3	474.1	621.7	658.7	1459.1	2526.5	3060.2	3069.5	3087.9	3101.7	3024.8
102.5°	394.6	532.4	670.1	704.6	1516.5	2599.0	3140.3	3301.1	3622.9	3864.2	3798.3
105°	510.3	627.0	743.7	772.9	1559.0	2607.2	3131.3	3492.0	4213.3	4754.2	4718.8
107.5°	629.0	737.7	846.5	873.7	1567.0	2491.3	2953.4	3456.4	4462.4	5217.0	5225.6
110°	709.1	807.3	905.5	930.1	1555.0	2388.4	2805.0	3367.4	4492.1	5335.7	5372.6

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	787.7	881.3	974.9	998.3	1555.5	2298.6	2670.1	3245.7	4396.7	5260.0	5316.8
115°	906.3	992.6	1079.1	1100.6	1569.9	2195.5	2508.4	3062.9	4171.7	5003.4	5082.0
117.5°	1023.6	1102.0	1180.5	1200.1	1599.1	2131.1	2397.1	2897.6	3898.3	4648.8	4736.0
120°	1091.8	1165.6	1239.5	1257.9	1622.8	2109.4	2352.6	2809.9	3724.3	4410.1	4494.8
122.5°	1158.5	1233.0	1307.5	1326.1	1656.9	2098.0	2318.5	2730.2	3553.7	4171.2	4254.8
125°	1260.9	1328.8	1396.7	1413.7	1703.0	2088.6	2281.4	2631.1	3330.7	3855.2	3932.2
127.5°	1344.0	1412.5	1481.1	1498.2	1748.9	2083.1	2250.3	2550.5	3151.1	3601.6	3666.5
130°	1388.5	1462.3	1536.1	1554.5	1782.5	2086.5	2238.4	2505.7	3040.4	3441.4	3501.4
132.5°	1434.4	1508.2	1582.1	1600.6	1809.7	2088.6	2228.0	2467.3	2946.0	3305.0	3358.7
135°	1502.7	1569.9	1637.2	1654.0	1839.4	2086.7	2210.3	2410.7	2811.5	3112.2	3158.5
137.5°	1572.4	1639.0	1705.5	1722.2	1883.8	2099.5	2207.3	2376.7	2715.5	2969.7	3007.6
140°	1630.2	1691.5	1752.8	1768.2	1911.1	2101.6	2196.9	2343.2	2635.9	2855.4	2890.9
142.5°	1674.7	1731.4	1788.1	1802.3	1933.8	2109.2	2196.9	2325.4	2582.6	2775.4	2805.9
145°	1743.0	1792.4	1841.9	1854.2	1963.5	2109.2	2182.1	2287.2	2497.5	2655.2	2678.3
147.5°	1811.2	1859.3	1907.4	1919.5	2007.0	2123.7	2182.1	2264.8	2430.3	2554.3	2573.4
150°	1855.7	1899.2	1942.8	1953.6	2029.8	2131.3	2182.1	2252.0	2391.7	2496.5	2511.9
152.5°	1901.7	1934.6	1967.7	1975.9	2044.7	2136.2	2182.1	2241.8	2361.0	2450.5	2462.3
155°	1969.9	1994.3	2018.7	2024.8	2077.2	2147.1	2182.1	2229.5	2324.5	2395.6	2403.4
157.5°	2020.4	2044.1	2067.9	2073.8	2109.9	2158.0	2182.1	2218.9	2292.8	2348.2	2353.6
160°	2054.5	2072.9	2091.4	2096.0	2124.7	2163.0	2182.1	2213.7	2277.0	2324.5	2327.6
162.5°	2088.6	2102.4	2116.3	2119.7	2140.5	2168.2	2182.1	2208.8	2262.2	2302.2	2305.2
165°	2125.6	2138.1	2150.7	2153.8	2163.3	2175.8	2182.1	2201.2	2239.4	2268.0	2271.2
167.5°	2159.8	2165.7	2171.7	2173.1	2181.0	2191.6	2196.9	2209.4	2234.4	2253.2	2254.6
170°	2182.1	2188.0	2193.9	2195.4	2195.8	2196.5	2196.9	2209.4	2234.4	2253.2	2253.2
172.5°	2193.9	2195.3	2196.6	2196.9	2196.9	2196.9	2196.9	2206.8	2226.6	2241.4	2240.2
175°	2210.3	2210.3	2210.3	2210.3	2205.8	2199.8	2196.9	2203.2	2215.7	2225.1	2225.1
177.5°	2210.3	2210.3	2210.3	2210.3	2206.8	2202.1	2199.8	2204.8	2214.6	2222.1	2220.8
180°	2210.3	2210.3	2210.3	2210.3	2210.3	2210.3	2210.3	2210.3	2210.3	2210.3	2210.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	597.6	597.6
2.5°	637.9	634.1
5°	820.5	824.4
7.5°	1104.9	1103.0
10°	1374.0	1391.2
12.5°	1569.9	1573.7
15°	1689.1	1696.7
17.5°	1735.2	1737.1
20°	1737.1	1733.3
22.5°	1715.9	1712.1
25°	1691.0	1689.1
27.5°	1667.9	1669.9
30°	1658.4	1664.1
32.5°	1658.4	1667.9
35°	1662.2	1671.8
37.5°	1660.3	1671.8
40°	1652.5	1666.0
42.5°	1631.4	1641.1
45°	1598.8	1610.3
47.5°	1556.5	1564.2
50°	1502.7	1510.3
52.5°	1435.5	1437.4
55°	1354.8	1362.4
57.5°	1268.2	1270.1
60°	1172.2	1177.9
62.5°	1070.4	1070.4
65°	962.7	966.6
67.5°	851.3	860.8
70°	737.9	739.8
72.5°	626.5	626.5
75°	511.1	513.0
77.5°	401.6	401.6
80°	297.9	299.8
82.5°	205.6	209.4
85°	128.7	128.7
87.5°	59.6	53.8
90°	56.3	56.3
92.5°	225.8	181.0
95°	787.0	651.2
97.5°	1885.6	1627.2
100°	2716.9	2409.0
102.5°	3534.6	3270.9
105°	4577.0	4435.3
107.5°	5259.9	5294.1
110°	5520.3	5667.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	5543.5	5770.3
115°	5396.5	5711.0
117.5°	5084.8	5433.6
120°	4833.6	5172.5
122.5°	4589.1	4923.3
125°	4240.1	4548.0
127.5°	3926.3	4186.1
130°	3741.4	3981.4
132.5°	3573.6	3788.5
135°	3343.6	3528.9
137.5°	3159.2	3310.9
140°	3032.7	3174.4
142.5°	2927.8	3049.8
145°	2770.6	2862.9
147.5°	2649.9	2726.4
150°	2574.0	2636.0
152.5°	2509.1	2555.9
155°	2434.4	2465.3
157.5°	2375.4	2397.1
160°	2340.1	2352.6
162.5°	2317.0	2328.9
165°	2283.7	2296.3
167.5°	2259.8	2265.1
170°	2253.2	2253.2
172.5°	2235.6	2231.0
175°	2225.1	2225.1
177.5°	2215.5	2210.3
180°	2210.3	2210.3

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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	0.13	0.82	1.28	1.96	3.55	13.32	14.01	14.47	15.15	16.74
	3H	0.82	1.44	1.98	2.58	4.19	15.15	15.77	16.31	16.91	18.52
	4H	1.11	1.70	2.27	2.84	4.46	15.79	16.38	16.96	17.53	19.14
	6H	1.35	1.89	2.52	3.04	4.66	16.22	16.76	17.39	17.91	19.53
	8H	1.42	1.93	2.59	3.09	4.71	16.34	16.85	17.51	18.01	19.63
	12H	1.43	1.91	2.60	3.07	4.71	16.40	16.89	17.58	18.05	19.68
4H	2H	7.33	7.92	8.50	9.06	10.68	13.57	14.16	14.74	15.31	16.92
	3H	8.88	9.37	10.06	10.54	12.17	15.61	16.10	16.78	17.27	18.89
	4H	8.97	9.42	10.15	10.58	12.22	16.37	16.82	17.55	17.98	19.62
	6H	8.97	9.36	10.15	10.54	12.17	16.90	17.29	18.09	18.47	20.11
	8H	8.94	9.30	10.12	10.48	12.13	17.06	17.43	18.24	18.60	20.25
	12H	8.89	9.22	10.09	10.40	12.06	17.15	17.48	18.35	18.66	20.32
8H	4H	10.40	10.76	11.58	11.94	13.59	16.42	16.78	17.60	17.95	19.60
	6H	10.64	10.93	11.84	12.15	13.80	17.04	17.34	18.24	18.56	20.20
	8H	10.65	10.91	11.86	12.10	13.77	17.26	17.52	18.47	18.71	20.38
	12H	10.61	10.84	11.82	12.03	13.73	17.40	17.63	18.61	18.82	20.52
12H	4H	10.54	10.87	11.73	12.05	13.70	16.36	16.69	17.56	17.87	19.53
	6H	10.89	11.15	12.10	12.35	14.01	17.02	17.28	18.23	18.47	20.14
	8H	10.95	11.18	12.16	12.37	14.07	17.25	17.47	18.46	18.66	20.36