

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: P938373

Luminaire Tested: SQ4-FB-150U-075D-940-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938373
REPORT IS A COMBINATION OF REPORTS P933622 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

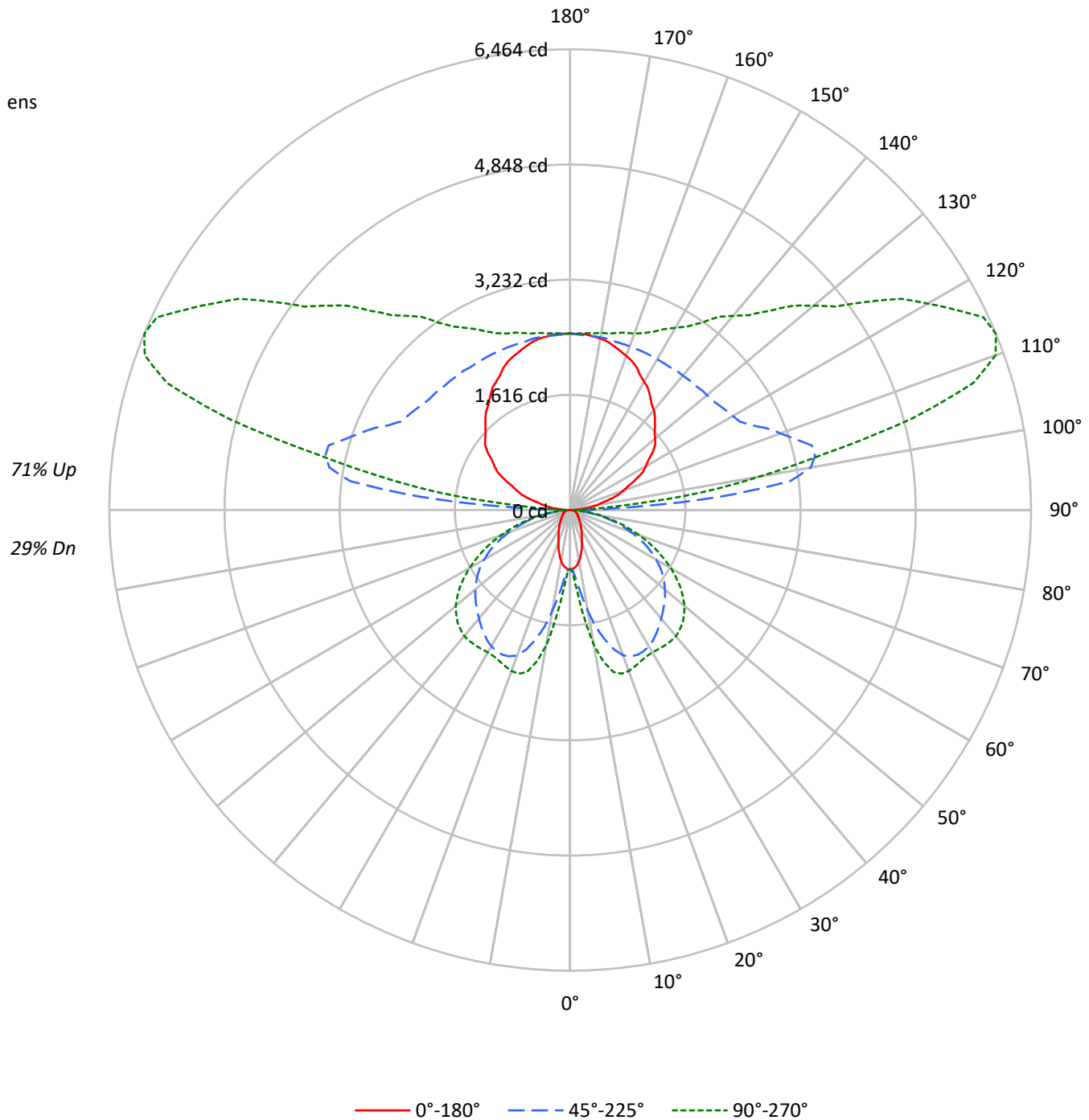
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22468.1 lumens
Efficiency: N/A
Efficacy: 117.8 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): 190.8
Input Voltage (V): NR
Input Current (A_{in}): 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	50	30	10	50	30	10	50	30	10	0																
RCR	0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29																											
	1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23																											
	2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	19																											
	3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16																											
	4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	13																											
	5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11																											
	6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10																											
	7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8																											
	8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7																											
	9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	6																											
	10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6																											

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2563	2563	2563
5°	2504	2963	3445
10°	2272	4320	5711
15°	1932	5645	6896
20°	1574	6543	7028
25°	1313	6849	6885
30°	1108	6894	6872
35°	980	6781	7050
40°	854	6634	7233
45°	774	6528	7262
50°	711	6432	7141
55°	682	6290	6825
60°	699	6017	6325
65°	728	5600	5638
70°	777	4887	4763
75°	865	3988	3717
80°	951	2769	2505
85°	862	1471	1282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7262 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.2	0.5
10°-20°	475.0	2.1
20°-30°	830.9	3.7
30°-40°	1069.5	4.8
40°-50°	1194.7	5.3
50°-60°	1144.2	5.1
60°-70°	906.8	4.0
70°-80°	533.2	2.4
80°-90°	157.6	0.7
90°-100°	1206.8	5.4
100°-110°	3172.7	14.1
110°-120°	3289.8	14.6
120°-130°	2638.8	11.7
130°-140°	2070.5	9.2
140°-150°	1589.2	7.1
150°-160°	1144.5	5.1
160°-170°	700.3	3.1
170°-180°	236.6	1.1
0°-30°	1413.0	6.3
0°-40°	2482.6	11.0
0°-60°	4821.4	21.5
0°-90°	6419.0	28.6
90°-120°	7669.3	34.1
90°-150°	13967.8	62.2
90°-180°	16049.0	71.4
0°-180°	22468.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	828	828	828	828	828	
5°	807	866	975	1103	1143	75
15°	605	1116	1881	2280	2352	168
25°	386	1266	2240	2339	2342	178
35°	261	1210	2110	2230	2318	163
45°	178	964	1865	2137	2232	138
55°	128	613	1582	1838	1889	117
65°	101	325	1175	1321	1340	100
75°	75	200	645	709	711	78
85°	27	61	160	176	178	28
90°	17	46	126	63	63	15
95°	160	625	2079	1072	729	177
105°	572	866	3508	5325	4968	606
115°	1015	1233	2810	5604	6397	1003
125°	1412	1584	2556	4318	5094	1254
135°	1683	1853	2476	3486	3953	1302
145°	1952	2077	2444	2974	3207	1223
155°	2207	2268	2444	2683	2762	1014
165°	2381	2413	2444	2540	2572	672
175°	2476	2476	2461	2492	2492	235
180°	2476	2476	2476	2476	2476	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	828.5	828.5	828.5	828.5	828.5	828.5	828.5	828.5	828.5	828.5	828.5
2.5°	828.5	828.5	833.8	836.5	841.8	844.5	849.8	855.1	871.1	873.8	879.1
5°	807.2	817.8	852.5	865.8	903.1	953.7	975.0	1009.7	1081.7	1103.0	1116.3
7.5°	775.2	799.2	884.4	905.8	999.0	1132.3	1188.2	1262.8	1377.4	1433.3	1478.6
10°	724.6	775.2	927.1	977.7	1129.6	1332.1	1436.0	1539.9	1713.0	1790.3	1819.6
12.5°	668.7	751.2	972.4	1041.7	1260.2	1555.9	1681.1	1795.6	1992.8	2096.7	2112.6
15°	604.7	716.6	1015.1	1116.3	1398.7	1742.3	1880.9	2022.1	2205.9	2280.5	2299.1
17.5°	548.8	690.0	1055.0	1161.6	1505.2	1910.2	2051.4	2168.6	2317.8	2368.4	2381.7
20°	479.5	647.4	1081.7	1220.2	1617.1	2032.7	2168.6	2259.2	2360.4	2392.4	2397.7
22.5°	428.9	602.1	1097.7	1241.5	1691.7	2107.3	2221.9	2293.8	2363.1	2373.7	2376.4
25°	386.3	551.4	1095.0	1265.5	1755.7	2152.6	2240.5	2293.8	2333.8	2339.1	2339.1
27.5°	346.3	495.5	1084.3	1270.8	1803.6	2163.3	2232.5	2269.8	2288.5	2299.1	2299.1
30°	311.7	442.2	1057.7	1260.2	1824.9	2152.6	2208.5	2227.2	2245.8	2261.8	2269.8
32.5°	285.0	391.6	1017.7	1238.8	1827.6	2126.0	2165.9	2176.6	2203.2	2240.5	2253.8
35°	261.1	341.0	972.4	1209.5	1811.6	2083.3	2110.0	2120.6	2173.9	2229.9	2248.5
37.5°	237.1	303.7	913.8	1158.9	1787.6	2032.7	2051.4	2070.0	2152.6	2219.2	2240.5
40°	213.1	271.7	844.5	1103.0	1750.3	1971.4	1987.4	2016.7	2126.0	2203.2	2224.5
42.5°	194.5	245.1	769.9	1044.4	1702.4	1902.2	1926.2	1968.8	2094.0	2176.6	2200.6
45°	178.5	218.4	690.0	964.4	1641.1	1830.3	1864.9	1923.5	2056.7	2136.6	2157.9
47.5°	162.5	199.8	607.4	881.8	1574.5	1758.3	1803.6	1870.2	2006.1	2083.3	2102.0
50°	149.2	181.2	524.8	793.9	1502.6	1681.1	1734.4	1803.6	1942.1	2014.1	2038.0
52.5°	138.5	165.2	447.6	706.0	1420.0	1601.2	1662.4	1734.4	1864.9	1934.2	1950.1
55°	127.9	151.8	381.0	612.7	1334.8	1515.9	1582.5	1651.8	1779.6	1838.2	1848.9
57.5°	122.5	141.2	325.0	524.8	1244.2	1420.0	1494.6	1558.5	1678.4	1723.7	1734.4
60°	114.6	133.2	282.4	450.2	1145.6	1329.4	1393.4	1457.3	1558.5	1595.8	1603.8
62.5°	106.6	127.9	250.4	378.3	1044.4	1222.9	1286.8	1345.4	1430.7	1457.3	1468.0
65°	101.2	122.5	226.4	325.0	940.4	1111.0	1174.9	1225.5	1294.8	1321.4	1326.8
67.5°	95.9	117.2	207.8	279.7	836.5	999.0	1047.0	1095.0	1148.3	1174.9	1177.6
70°	87.9	111.9	191.8	247.8	729.9	871.1	911.1	961.7	1004.3	1017.7	1025.7
72.5°	82.6	103.9	181.2	223.8	620.7	748.6	785.9	815.2	852.5	865.8	865.8
75°	74.6	93.2	170.5	199.8	508.8	612.7	644.7	674.0	703.3	708.6	700.6
77.5°	66.6	82.6	146.5	167.8	396.9	484.8	511.5	527.5	551.4	556.8	559.4
80°	55.9	71.9	114.6	130.5	287.7	357.0	375.6	388.9	410.3	410.3	415.6
82.5°	42.6	55.9	82.6	93.2	194.5	245.1	261.1	269.1	282.4	282.4	282.4
85°	26.6	34.6	53.3	61.3	117.2	149.2	159.8	162.5	173.2	175.8	175.8
87.5°	13.3	18.6	34.6	37.3	61.3	77.3	77.3	82.6	82.6	79.9	77.3
90°	16.6	29.9	43.2	46.5	73.1	108.5	126.3	112.2	84.2	63.1	63.1
92.5°	66.4	179.4	292.4	320.7	450.8	624.4	711.1	623.2	447.5	315.7	303.2
95°	159.5	366.2	573.0	624.7	1109.4	1755.6	2078.6	1854.9	1407.4	1071.7	1033.7
97.5°	275.8	458.2	640.6	686.2	1494.3	2571.7	3110.4	2969.0	2686.2	2474.1	2401.7
100°	365.5	530.9	696.4	737.8	1634.5	2830.0	3427.8	3438.1	3458.8	3474.3	3388.1
102.5°	442.0	596.3	750.6	789.3	1698.7	2911.2	3517.5	3697.7	4058.1	4328.4	4254.5
105°	571.6	702.3	833.0	865.7	1746.3	2920.5	3507.5	3911.5	4719.4	5325.2	5285.6
107.5°	704.5	826.4	948.2	978.7	1755.1	2790.5	3308.2	3871.6	4998.5	5843.7	5853.3
110°	794.2	904.3	1014.3	1041.8	1741.9	2675.3	3142.0	3772.0	5031.8	5976.6	6018.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	882.3	987.2	1092.1	1118.3	1742.4	2574.7	2990.8	3635.5	4924.8	5891.9	5955.4
115°	1015.3	1112.0	1208.7	1232.9	1758.5	2459.3	2809.7	3430.8	4672.8	5604.4	5692.5
117.5°	1146.5	1234.3	1322.2	1344.2	1791.1	2387.0	2685.0	3245.6	4366.6	5207.3	5305.0
120°	1222.9	1305.6	1388.3	1409.0	1817.7	2362.7	2635.2	3147.3	4171.6	4939.8	5034.7
122.5°	1297.6	1381.1	1464.6	1485.4	1856.0	2350.0	2597.0	3058.2	3980.5	4672.3	4765.9
125°	1412.4	1488.4	1564.5	1583.5	1907.5	2339.5	2555.5	2947.3	3730.8	4318.3	4404.6
127.5°	1505.3	1582.1	1659.0	1678.1	1958.9	2333.4	2520.6	2857.0	3529.7	4034.3	4107.0
130°	1555.2	1637.9	1720.6	1741.3	1996.6	2337.0	2507.3	2806.7	3405.7	3854.8	3922.0
132.5°	1606.7	1689.4	1772.1	1792.8	2027.0	2339.4	2495.6	2763.7	3299.9	3702.0	3762.2
135°	1683.1	1758.4	1833.8	1852.6	2060.3	2337.3	2475.7	2700.2	3149.2	3485.9	3537.8
137.5°	1761.3	1835.9	1910.4	1929.1	2110.2	2351.6	2472.4	2662.1	3041.8	3326.4	3368.9
140°	1826.1	1894.7	1963.5	1980.6	2140.6	2354.0	2460.7	2624.7	2952.6	3198.5	3238.2
142.5°	1875.9	1939.4	2002.9	2018.8	2166.1	2362.5	2460.7	2604.8	2892.7	3108.8	3143.0
145°	1952.4	2007.8	2063.1	2076.9	2199.3	2362.5	2444.1	2561.9	2797.5	2974.2	3000.0
147.5°	2028.7	2082.6	2136.5	2150.0	2248.1	2378.8	2444.1	2536.8	2722.2	2861.2	2882.6
150°	2078.6	2127.4	2176.1	2188.3	2273.5	2387.3	2444.1	2522.5	2679.0	2796.4	2813.7
152.5°	2130.1	2167.1	2203.9	2213.2	2290.2	2392.8	2444.1	2511.0	2644.6	2744.9	2758.0
155°	2206.6	2233.9	2261.2	2268.0	2326.7	2405.0	2444.1	2497.3	2603.7	2683.4	2692.1
157.5°	2263.1	2289.6	2316.2	2322.8	2363.2	2417.1	2444.1	2485.5	2568.2	2630.3	2636.4
160°	2301.3	2321.9	2342.6	2347.8	2379.9	2422.7	2444.1	2479.6	2550.4	2603.6	2607.2
162.5°	2339.4	2355.0	2370.4	2374.3	2397.6	2428.6	2444.1	2474.1	2533.9	2578.8	2582.0
165°	2381.0	2395.0	2409.1	2412.6	2423.1	2437.1	2444.1	2465.5	2508.3	2540.5	2544.0
167.5°	2419.3	2425.9	2432.5	2434.2	2443.1	2454.9	2460.7	2474.8	2502.8	2523.9	2525.4
170°	2444.1	2450.8	2457.5	2459.1	2459.7	2460.4	2460.7	2474.8	2502.8	2523.9	2523.9
172.5°	2457.5	2458.9	2460.4	2460.7	2460.7	2460.7	2460.7	2471.8	2494.0	2510.6	2509.3
175°	2475.7	2475.7	2475.7	2475.7	2470.8	2464.1	2460.7	2467.8	2481.8	2492.3	2492.3
177.5°	2475.7	2475.7	2475.7	2475.7	2471.8	2466.7	2464.1	2469.6	2480.7	2489.0	2487.5
180°	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	828.5	828.5
2.5°	884.4	879.1
5°	1137.6	1142.9
7.5°	1531.9	1529.2
10°	1904.8	1928.8
12.5°	2176.6	2181.9
15°	2341.7	2352.4
17.5°	2405.7	2408.3
20°	2408.3	2403.0
22.5°	2379.0	2373.7
25°	2344.4	2341.7
27.5°	2312.4	2315.1
30°	2299.1	2307.1
32.5°	2299.1	2312.4
35°	2304.4	2317.8
37.5°	2301.8	2317.8
40°	2291.1	2309.8
42.5°	2261.8	2275.1
45°	2216.5	2232.5
47.5°	2157.9	2168.6
50°	2083.3	2094.0
52.5°	1990.1	1992.8
55°	1878.2	1888.9
57.5°	1758.3	1761.0
60°	1625.1	1633.1
62.5°	1483.9	1483.9
65°	1334.8	1340.1
67.5°	1180.2	1193.6
70°	1023.1	1025.7
72.5°	868.5	868.5
75°	708.6	711.3
77.5°	556.8	556.8
80°	412.9	415.6
82.5°	285.0	290.4
85°	178.5	178.5
87.5°	82.6	74.6
90°	63.1	63.1
92.5°	252.9	202.7
95°	881.5	729.4
97.5°	2112.2	1822.7
100°	3043.3	2698.4
102.5°	3959.1	3663.7
105°	5126.9	4968.1
107.5°	5891.7	5930.1
110°	6183.4	6348.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	6209.4	6463.5
115°	6044.7	6397.0
117.5°	5695.6	6086.3
120°	5414.2	5793.8
122.5°	5140.4	5514.7
125°	4749.5	5094.4
127.5°	4398.0	4688.9
130°	4190.8	4459.6
132.5°	4002.8	4243.6
135°	3745.3	3952.8
137.5°	3538.8	3708.6
140°	3397.0	3555.7
142.5°	3279.6	3416.1
145°	3103.5	3206.8
147.5°	2968.3	3053.9
150°	2883.2	2952.6
152.5°	2810.4	2862.8
155°	2726.8	2761.5
157.5°	2660.7	2685.0
160°	2621.2	2635.2
162.5°	2595.4	2608.7
165°	2558.1	2572.1
167.5°	2531.2	2537.2
170°	2523.9	2523.9
172.5°	2504.2	2499.0
175°	2492.3	2492.3
177.5°	2481.6	2475.7
180°	2475.7	2475.7



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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	1.89	2.61	3.01	3.72	5.27	15.08	15.80	16.20	16.91	18.46
	3H	2.58	3.23	3.71	4.35	5.91	16.92	17.56	18.04	18.68	20.24
	4H	2.88	3.49	4.01	4.61	6.18	17.56	18.17	18.69	19.29	20.86
	6H	3.12	3.68	4.26	4.80	6.38	17.98	18.55	19.13	19.67	21.25
	8H	3.18	3.72	4.33	4.86	6.43	18.10	18.64	19.25	19.78	21.35
	12H	3.19	3.70	4.34	4.84	6.43	18.17	18.68	19.32	19.81	21.41
4H	2H	9.10	9.71	10.24	10.83	12.40	15.34	15.95	16.48	17.07	18.64
	3H	10.65	11.16	11.80	12.31	13.89	17.38	17.89	18.52	19.03	20.61
	4H	10.74	11.21	11.89	12.34	13.94	18.14	18.61	19.29	19.75	21.35
	6H	10.74	11.14	11.90	12.30	13.89	18.67	19.08	19.83	20.24	21.83
	8H	10.71	11.09	11.87	12.24	13.85	18.83	19.21	19.99	20.36	21.97
	12H	10.66	11.00	11.83	12.17	13.78	18.92	19.27	20.10	20.43	22.04
8H	4H	12.17	12.55	13.33	13.70	15.31	18.19	18.56	19.34	19.71	21.32
	6H	12.41	12.72	13.58	13.91	15.52	18.81	19.12	19.99	20.32	21.92
	8H	12.42	12.69	13.61	13.87	15.49	19.03	19.31	20.22	20.48	22.10
	12H	12.38	12.62	13.57	13.79	15.45	19.17	19.41	20.36	20.58	22.24
12H	4H	12.31	12.65	13.48	13.81	15.43	18.13	18.47	19.30	19.64	21.25
	6H	12.67	12.94	13.85	14.11	15.73	18.79	19.07	19.98	20.24	21.86
	8H	12.73	12.97	13.91	14.14	15.79	19.02	19.26	20.21	20.43	22.08