

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: P938326

Luminaire Tested: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-12-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938326
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-92765-1D-UNV-STD-W-12-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

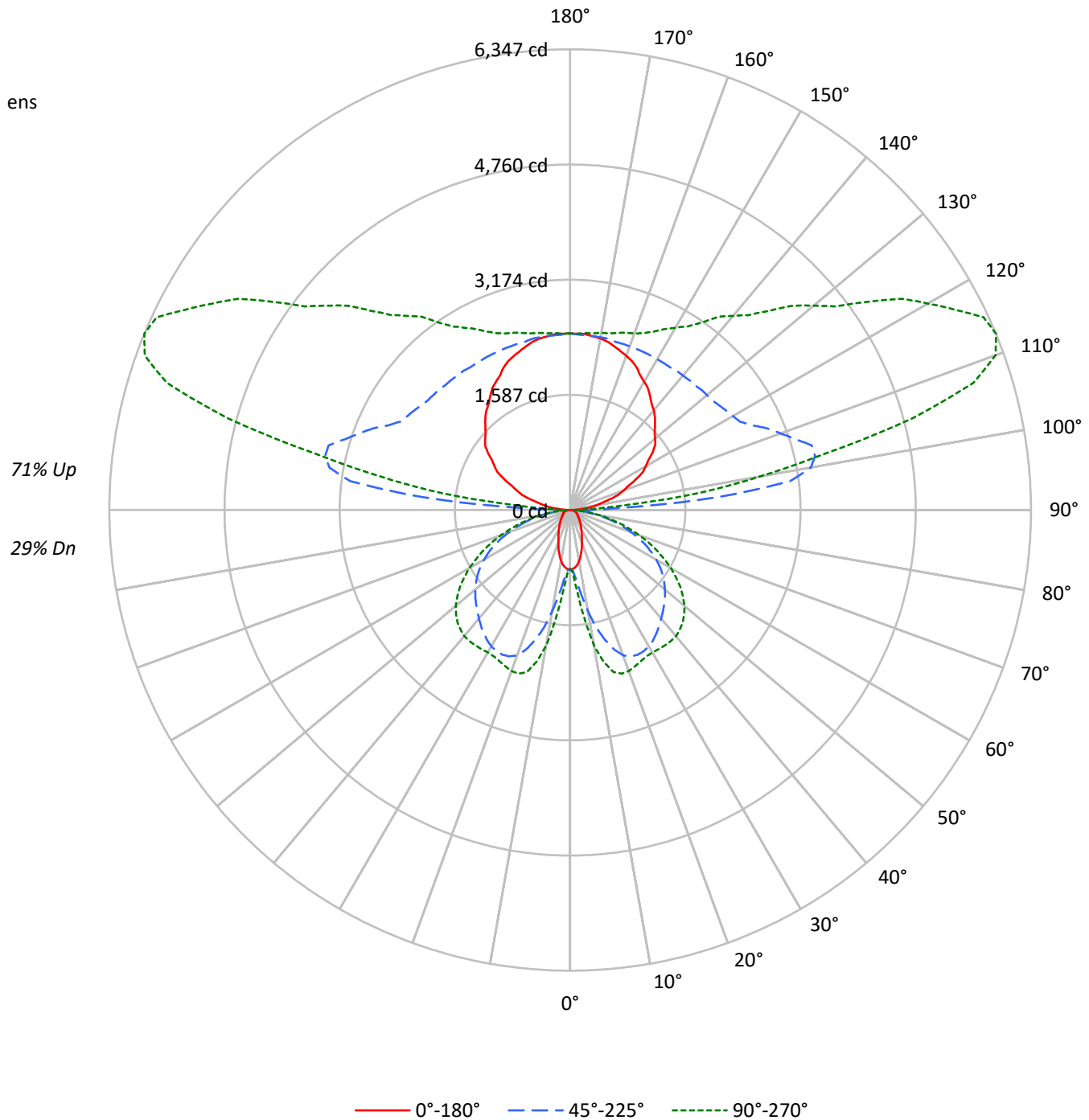
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22064.2 lumens
Efficiency: N/A
Efficacy: 115.6 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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CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-12-3000K

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	50	30	10
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°	2517	2517	2517
5°	2459	2909	3383
10°	2232	4242	5608
15°	1898	5544	6772
20°	1545	6426	6901
25°	1289	6726	6761
30°	1088	6770	6748
35°	963	6659	6923
40°	839	6515	7103
45°	760	6410	7131
50°	698	6316	7013
55°	669	6178	6702
60°	686	5909	6211
65°	715	5499	5537
70°	763	4799	4678
75°	850	3916	3650
80°	934	2719	2459
85°	849	1446	1259

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7131 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.2	0.5
10°-20°	466.5	2.1
20°-30°	815.9	3.7
30°-40°	1050.3	4.8
40°-50°	1173.2	5.3
50°-60°	1123.6	5.1
60°-70°	890.5	4.0
70°-80°	523.6	2.4
80°-90°	154.7	0.7
90°-100°	1185.1	5.4
100°-110°	3115.7	14.1
110°-120°	3230.6	14.6
120°-130°	2591.4	11.7
130°-140°	2033.3	9.2
140°-150°	1560.6	7.1
150°-160°	1123.9	5.1
160°-170°	687.7	3.1
170°-180°	232.3	1.1
0°-30°	1387.6	6.3
0°-40°	2437.9	11.0
0°-60°	4734.8	21.5
0°-90°	6303.6	28.6
90°-120°	7531.4	34.1
90°-150°	13716.7	62.2
90°-180°	15761.0	71.4
0°-180°	22064.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	814	814	814	814	814	
5°	793	850	958	1083	1122	73
15°	594	1096	1847	2240	2310	165
25°	379	1243	2200	2297	2300	175
35°	256	1188	2072	2190	2276	160
45°	175	947	1831	2098	2192	136
55°	126	602	1554	1805	1855	114
65°	99	319	1154	1298	1316	99
75°	73	196	633	696	698	77
85°	26	60	157	173	175	28
90°	16	46	124	62	62	15
95°	157	614	2041	1052	716	174
105°	561	850	3444	5230	4879	595
115°	997	1211	2759	5504	6282	985
125°	1387	1555	2510	4241	5003	1231
135°	1653	1819	2431	3423	3882	1279
145°	1917	2040	2400	2921	3149	1201
155°	2167	2227	2400	2635	2712	996
165°	2338	2369	2400	2495	2526	660
175°	2431	2431	2416	2448	2448	231
180°	2431	2431	2431	2431	2431	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	813.6	813.6	813.6	813.6	813.6	813.6	813.6	813.6	813.6	813.6	813.6
2.5°	813.6	813.6	818.8	821.5	826.7	829.3	834.5	839.8	855.5	858.1	863.3
5°	792.7	803.1	837.2	850.2	886.9	936.6	957.5	991.6	1062.2	1083.2	1096.2
7.5°	761.3	784.8	868.5	889.5	981.0	1111.9	1166.9	1240.1	1352.6	1407.6	1452.0
10°	711.6	761.3	910.4	960.1	1109.3	1308.1	1410.2	1512.2	1682.2	1758.1	1786.9
12.5°	656.6	737.7	954.9	1023.0	1237.5	1527.9	1650.8	1763.3	1956.9	2059.0	2074.7
15°	593.9	703.7	996.8	1096.2	1373.5	1711.0	1847.1	1985.7	2166.2	2239.5	2257.8
17.5°	538.9	677.6	1036.1	1140.7	1478.2	1875.8	2014.5	2129.6	2276.1	2325.8	2338.9
20°	470.9	635.7	1062.2	1198.3	1588.1	1996.2	2129.6	2218.5	2318.0	2349.3	2354.6
22.5°	421.2	591.2	1077.9	1219.2	1661.3	2069.4	2181.9	2252.6	2320.6	2331.0	2333.7
25°	379.3	541.5	1075.3	1242.7	1724.1	2113.9	2200.2	2252.6	2291.8	2297.0	2297.0
27.5°	340.1	486.6	1064.8	1248.0	1771.2	2124.4	2192.4	2229.0	2247.3	2257.8	2257.8
30°	306.1	434.3	1038.7	1237.5	1792.1	2113.9	2168.8	2187.1	2205.5	2221.2	2229.0
32.5°	279.9	384.6	999.4	1216.6	1794.7	2087.7	2127.0	2137.4	2163.6	2200.2	2213.3
35°	256.4	334.9	954.9	1187.8	1779.0	2045.9	2072.0	2082.5	2134.8	2189.8	2208.1
37.5°	232.8	298.2	897.3	1138.1	1755.5	1996.2	2014.5	2032.8	2113.9	2179.3	2200.2
40°	209.3	266.8	829.3	1083.2	1718.9	1936.0	1951.7	1980.5	2087.7	2163.6	2184.5
42.5°	191.0	240.7	756.1	1025.6	1671.8	1868.0	1891.5	1933.4	2056.3	2137.4	2161.0
45°	175.3	214.5	677.6	947.0	1611.6	1797.3	1831.4	1888.9	2019.7	2098.2	2119.1
47.5°	159.6	196.2	596.5	865.9	1546.2	1726.7	1771.2	1836.6	1970.0	2045.9	2064.2
50°	146.5	177.9	515.4	779.6	1475.6	1650.8	1703.2	1771.2	1907.2	1977.9	2001.4
52.5°	136.0	162.2	439.5	693.3	1394.5	1572.4	1632.5	1703.2	1831.4	1899.4	1915.1
55°	125.6	149.1	374.1	601.7	1310.8	1488.6	1554.1	1622.1	1747.6	1805.2	1815.7
57.5°	120.3	138.7	319.2	515.4	1221.8	1394.5	1467.7	1530.5	1648.2	1692.7	1703.2
60°	112.5	130.8	277.3	442.1	1125.0	1305.5	1368.3	1431.1	1530.5	1567.1	1575.0
62.5°	104.6	125.6	245.9	371.5	1025.6	1200.9	1263.7	1321.2	1404.9	1431.1	1441.6
65°	99.4	120.3	222.4	319.2	923.5	1091.0	1153.8	1203.5	1271.5	1297.7	1302.9
67.5°	94.2	115.1	204.1	274.7	821.5	981.0	1028.2	1075.3	1127.6	1153.8	1156.4
70°	86.3	109.9	188.4	243.3	716.8	855.5	894.7	944.4	986.3	999.4	1007.3
72.5°	81.1	102.0	177.9	219.8	609.6	735.1	771.8	800.5	837.2	850.2	850.2
75°	73.3	91.6	167.4	196.2	499.7	601.7	633.1	661.9	690.7	695.9	688.0
77.5°	65.4	81.1	143.9	164.8	389.8	476.1	502.3	518.0	541.5	546.8	549.4
80°	54.9	70.6	112.5	128.2	282.5	350.6	368.9	382.0	402.9	402.9	408.1
82.5°	41.9	54.9	81.1	91.6	191.0	240.7	256.4	264.2	277.3	277.3	277.3
85°	26.2	34.0	52.3	60.2	115.1	146.5	157.0	159.6	170.0	172.7	172.7
87.5°	13.1	18.3	34.0	36.6	60.2	75.9	75.9	81.1	81.1	78.5	75.9
90°	16.3	29.4	42.5	45.7	71.8	106.6	124.0	110.2	82.7	62.0	62.0
92.5°	65.2	176.2	287.2	314.9	442.7	613.1	698.3	612.0	439.4	310.0	297.7
95°	156.6	359.6	562.7	613.5	1089.4	1724.0	2041.3	1821.5	1382.1	1052.5	1015.1
97.5°	270.9	450.0	629.1	673.9	1467.5	2525.5	3054.5	2915.6	2637.9	2429.6	2358.5
100°	358.9	521.4	683.8	724.5	1605.1	2779.1	3366.1	3376.3	3396.6	3411.8	3327.2
102.5°	434.0	585.6	737.1	775.1	1668.1	2858.9	3454.3	3631.2	3985.1	4250.6	4178.0
105°	561.3	689.7	818.1	850.1	1714.9	2867.9	3444.4	3841.1	4634.5	5229.5	5190.5
107.5°	691.9	811.5	931.2	961.1	1723.6	2740.3	3248.7	3802.0	4908.6	5738.6	5748.0
110°	779.9	888.0	996.0	1023.1	1710.6	2627.2	3085.5	3704.1	4941.3	5869.1	5909.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	866.5	969.4	1072.4	1098.2	1711.1	2528.4	2937.0	3570.1	4836.3	5785.9	5848.3
115°	997.0	1092.0	1187.0	1210.7	1726.9	2415.1	2759.2	3369.1	4588.8	5503.7	5590.2
117.5°	1125.9	1212.1	1298.5	1320.0	1758.9	2344.1	2636.8	3187.2	4288.1	5113.7	5209.6
120°	1200.9	1282.2	1363.3	1383.7	1785.1	2320.2	2587.8	3090.8	4096.6	4851.0	4944.2
122.5°	1274.3	1356.3	1438.2	1458.7	1822.6	2307.8	2550.4	3003.2	3909.0	4588.3	4680.2
125°	1387.0	1461.6	1536.3	1555.0	1873.2	2297.5	2509.5	2894.3	3663.7	4240.7	4325.4
127.5°	1478.3	1553.7	1629.1	1648.0	1923.7	2291.4	2475.3	2805.6	3466.2	3961.7	4033.2
130°	1527.3	1608.5	1689.7	1710.0	1960.7	2295.0	2462.2	2756.2	3344.4	3785.5	3851.5
132.5°	1577.9	1659.0	1740.2	1760.5	1990.6	2297.4	2450.8	2714.0	3240.6	3635.4	3694.5
135°	1652.9	1726.8	1800.8	1819.3	2023.3	2295.3	2431.2	2651.7	3092.6	3423.3	3474.2
137.5°	1729.6	1802.8	1876.1	1894.4	2072.2	2309.3	2427.9	2614.3	2987.1	3266.6	3308.3
140°	1793.3	1860.7	1928.2	1945.0	2102.1	2311.7	2416.5	2577.5	2899.5	3141.0	3180.0
142.5°	1842.2	1904.5	1966.9	1982.5	2127.2	2320.0	2416.5	2557.9	2840.7	3052.9	3086.5
145°	1917.3	1971.7	2026.0	2039.6	2159.8	2320.0	2400.2	2515.8	2747.2	2920.7	2946.1
147.5°	1992.2	2045.2	2098.1	2111.4	2207.6	2336.0	2400.2	2491.2	2673.2	2809.8	2830.8
150°	2041.3	2089.1	2137.0	2149.0	2232.7	2344.4	2400.2	2477.1	2630.8	2746.1	2763.1
152.5°	2091.8	2128.1	2164.3	2173.4	2249.0	2349.8	2400.2	2465.9	2597.1	2695.5	2708.5
155°	2166.9	2193.8	2220.5	2227.3	2284.9	2361.7	2400.2	2452.4	2556.9	2635.2	2643.7
157.5°	2222.4	2248.5	2274.5	2281.1	2320.7	2373.7	2400.2	2440.8	2522.0	2583.0	2589.0
160°	2259.9	2280.2	2300.5	2305.6	2337.1	2379.2	2400.2	2435.0	2504.6	2556.8	2560.3
162.5°	2297.4	2312.6	2327.8	2331.6	2354.5	2384.9	2400.2	2429.6	2488.3	2532.4	2535.6
165°	2338.2	2352.0	2365.7	2369.2	2379.5	2393.3	2400.2	2421.2	2463.2	2494.8	2498.3
167.5°	2375.8	2382.3	2388.8	2390.4	2399.1	2410.7	2416.5	2430.3	2457.8	2478.5	2480.0
170°	2400.2	2406.7	2413.3	2414.9	2415.4	2416.1	2416.5	2430.3	2457.8	2478.5	2478.5
172.5°	2413.3	2414.7	2416.1	2416.5	2416.5	2416.5	2416.5	2427.4	2449.2	2465.5	2464.2
175°	2431.2	2431.2	2431.2	2431.2	2426.3	2419.8	2416.5	2423.4	2437.2	2447.5	2447.5
177.5°	2431.2	2431.2	2431.2	2431.2	2427.4	2422.3	2419.8	2425.2	2436.1	2444.2	2442.7
180°	2431.2	2431.2	2431.2	2431.2	2431.2	2431.2	2431.2	2431.2	2431.2	2431.2	2431.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	813.6	813.6
2.5°	868.5	863.3
5°	1117.2	1122.4
7.5°	1504.3	1501.7
10°	1870.6	1894.1
12.5°	2137.4	2142.7
15°	2299.6	2310.1
17.5°	2362.4	2365.0
20°	2365.0	2359.8
22.5°	2336.3	2331.0
25°	2302.3	2299.6
27.5°	2270.9	2273.5
30°	2257.8	2265.6
32.5°	2257.8	2270.9
35°	2263.0	2276.1
37.5°	2260.4	2276.1
40°	2249.9	2268.2
42.5°	2221.2	2234.2
45°	2176.7	2192.4
47.5°	2119.1	2129.6
50°	2045.9	2056.3
52.5°	1954.3	1956.9
55°	1844.4	1854.9
57.5°	1726.7	1729.3
60°	1595.9	1603.8
62.5°	1457.3	1457.3
65°	1310.8	1316.0
67.5°	1159.0	1172.1
70°	1004.7	1007.3
72.5°	852.8	852.8
75°	695.9	698.5
77.5°	546.8	546.8
80°	405.5	408.1
82.5°	279.9	285.2
85°	175.3	175.3
87.5°	81.1	73.3
90°	62.0	62.0
92.5°	248.4	199.1
95°	865.7	716.3
97.5°	2074.2	1789.9
100°	2988.5	2649.8
102.5°	3888.0	3597.8
105°	5034.7	4878.8
107.5°	5785.8	5823.4
110°	6072.2	6234.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	6097.8	6347.3
115°	5936.0	6282.0
117.5°	5593.2	5976.8
120°	5316.9	5689.7
122.5°	5047.9	5415.6
125°	4664.1	5002.8
127.5°	4318.9	4604.6
130°	4115.5	4379.4
132.5°	3930.9	4167.3
135°	3678.0	3881.8
137.5°	3475.1	3641.9
140°	3335.9	3491.8
142.5°	3220.6	3354.7
145°	3047.7	3149.2
147.5°	2914.9	2999.0
150°	2831.3	2899.5
152.5°	2759.9	2811.4
155°	2677.8	2711.9
157.5°	2612.9	2636.8
160°	2574.1	2587.8
162.5°	2548.7	2561.8
165°	2512.1	2525.8
167.5°	2485.7	2491.6
170°	2478.5	2478.5
172.5°	2459.1	2454.1
175°	2447.5	2447.5
177.5°	2437.0	2431.2
180°	2431.2	2431.2



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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	1.83	2.54	2.94	3.66	5.20	15.02	15.74	16.14	16.85	18.40
	3H	2.52	3.16	3.65	4.29	5.85	16.85	17.50	17.98	18.62	20.18
	4H	2.81	3.42	3.95	4.55	6.11	17.49	18.11	18.63	19.23	20.79
	6H	3.06	3.62	4.20	4.74	6.32	17.92	18.48	19.06	19.61	21.19
	8H	3.12	3.65	4.26	4.80	6.37	18.04	18.58	19.19	19.72	21.29
	12H	3.13	3.64	4.28	4.77	6.37	18.11	18.61	19.26	19.75	21.34
4H	2H	9.03	9.64	10.18	10.77	12.33	15.28	15.89	16.42	17.01	18.58
	3H	10.59	11.10	11.73	12.25	13.82	17.31	17.82	18.46	18.97	20.55
	4H	10.67	11.14	11.82	12.28	13.88	18.08	18.55	19.23	19.68	21.28
	6H	10.68	11.08	11.83	12.24	13.83	18.61	19.01	19.77	20.17	21.76
	8H	10.65	11.03	11.80	12.18	13.78	18.77	19.15	19.93	20.30	21.91
	12H	10.60	10.94	11.77	12.10	13.71	18.86	19.20	20.03	20.37	21.98
8H	4H	12.11	12.49	13.27	13.64	15.24	18.12	18.50	19.28	19.65	21.26
	6H	12.34	12.66	13.52	13.85	15.45	18.75	19.06	19.93	20.26	21.86
	8H	12.36	12.63	13.54	13.80	15.43	18.97	19.24	20.15	20.41	22.04
	12H	12.32	12.56	13.51	13.73	15.39	19.11	19.35	20.30	20.52	22.18
12H	4H	12.25	12.59	13.42	13.75	15.36	18.07	18.41	19.24	19.57	21.19
	6H	12.60	12.87	13.79	14.05	15.67	18.73	19.00	19.91	20.18	21.80
	8H	12.66	12.90	13.85	14.07	15.73	18.96	19.20	20.14	20.37	22.02