

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: P937927

Luminaire Tested: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-12-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937927
REPORT IS A COMBINATION OF REPORTS P933590 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-12-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

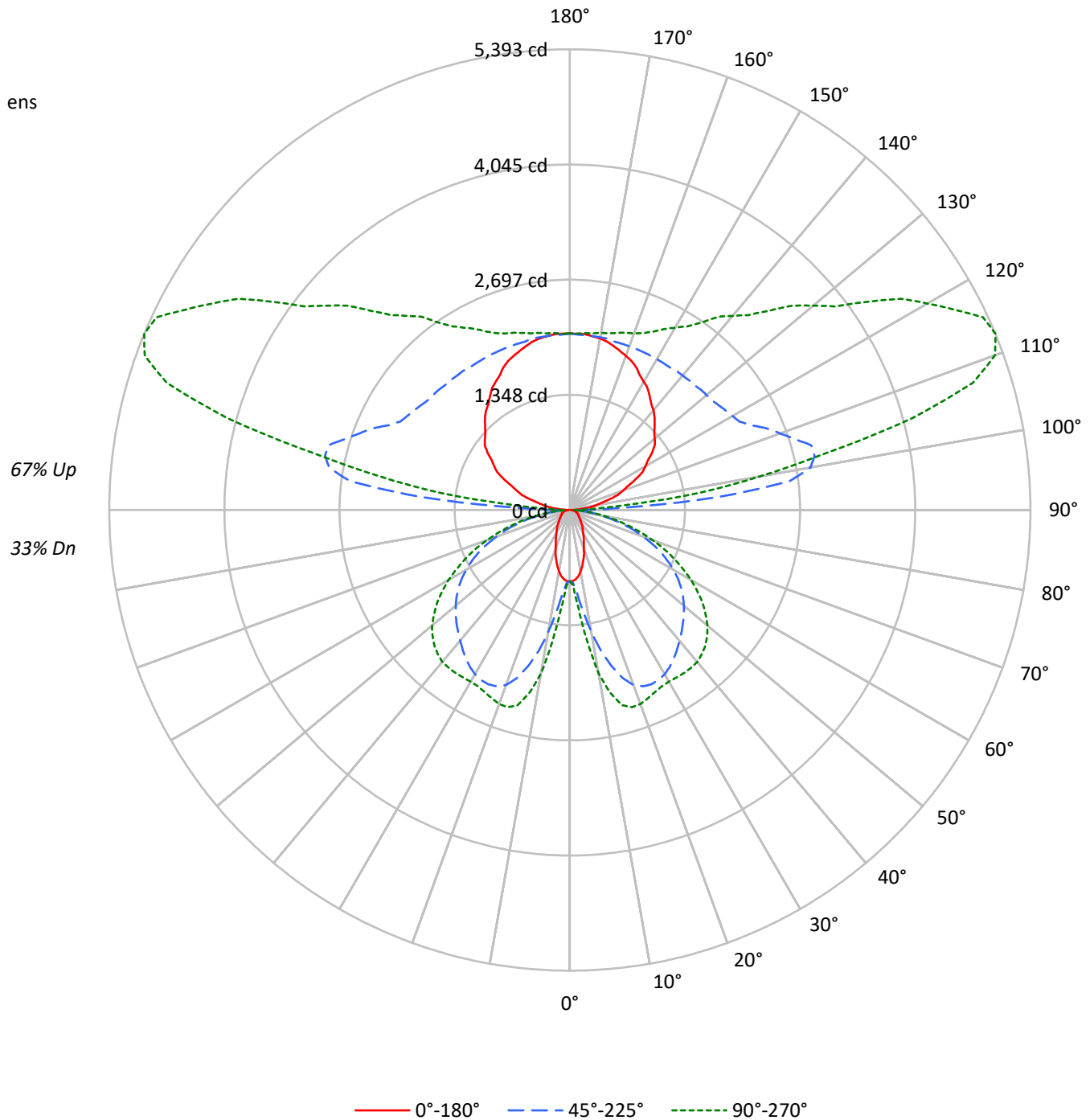
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19842.9 lumens
Efficiency: N/A
Efficacy: 119.0 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): 166.8
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				
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33			33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27			27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22			22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18			18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15			15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13			13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11			11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10			10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8			8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7			7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7			7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2576	2576	2576
5°	2517	2978	3463
10°	2284	4343	5741
15°	1942	5675	6931
20°	1582	6577	7064
25°	1320	6885	6921
30°	1114	6930	6908
35°	985	6817	7086
40°	859	6669	7271
45°	778	6561	7299
50°	715	6465	7179
55°	685	6323	6860
60°	702	6048	6358
65°	732	5629	5668
70°	782	4912	4788
75°	869	4008	3736
80°	956	2784	2517
85°	868	1480	1288

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7299 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.7	0.5
10°-20°	477.5	2.4
20°-30°	835.2	4.2
30°-40°	1075.1	5.4
40°-50°	1200.9	6.1
50°-60°	1150.2	5.8
60°-70°	911.5	4.6
70°-80°	536.0	2.7
80°-90°	156.8	0.8
90°-100°	1007.0	5.1
100°-110°	2647.5	13.3
110°-120°	2745.1	13.8
120°-130°	2201.9	11.1
130°-140°	1727.7	8.7
140°-150°	1326.1	6.7
150°-160°	955.0	4.8
160°-170°	584.3	2.9
170°-180°	197.4	1.0
0°-30°	1420.4	7.2
0°-40°	2495.5	12.6
0°-60°	4846.5	24.4
0°-90°	6450.8	32.5
90°-120°	6399.6	32.3
90°-150°	11655.4	58.7
90°-180°	13392.0	67.5
0°-180°	19842.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	833	833	833	833	833	
5°	811	870	980	1109	1149	75
15°	608	1122	1891	2292	2365	169
25°	388	1272	2252	2351	2354	179
35°	262	1216	2121	2242	2330	164
45°	179	969	1875	2148	2244	139
55°	128	616	1591	1848	1899	117
65°	102	327	1181	1328	1347	101
75°	75	201	648	712	715	78
85°	27	62	161	177	179	28
90°	14	39	105	53	53	13
95°	133	521	1734	894	609	148
105°	477	722	2927	4444	4146	506
115°	847	1029	2345	4677	5338	837
125°	1178	1321	2132	3603	4251	1046
135°	1404	1546	2066	2909	3298	1087
145°	1629	1733	2040	2482	2676	1021
155°	1841	1892	2040	2239	2304	846
165°	1987	2013	2040	2120	2146	561
175°	2066	2066	2053	2080	2080	196
180°	2066	2066	2066	2066	2066	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	832.8	832.8	832.8	832.8	832.8	832.8	832.8	832.8	832.8	832.8	832.8
2.5°	832.8	832.8	838.2	840.8	846.2	848.9	854.2	859.6	875.7	878.3	883.7
5°	811.4	822.1	856.9	870.3	907.8	958.7	980.1	1015.0	1087.3	1108.7	1122.1
7.5°	779.3	803.4	889.0	910.5	1004.2	1138.2	1194.4	1269.4	1384.5	1440.8	1486.3
10°	728.4	779.3	931.9	982.8	1135.5	1339.0	1443.5	1547.9	1722.0	1799.6	1829.1
12.5°	672.1	755.2	977.4	1047.1	1266.7	1564.0	1689.8	1805.0	2003.1	2107.6	2123.6
15°	607.9	720.3	1020.4	1122.1	1406.0	1751.4	1890.7	2032.6	2217.4	2292.3	2311.1
17.5°	551.6	693.6	1060.5	1167.6	1513.1	1920.1	2062.0	2179.9	2329.8	2380.7	2394.1
20°	482.0	650.7	1087.3	1226.5	1625.6	2043.3	2179.9	2270.9	2372.7	2404.8	2410.2
22.5°	431.1	605.2	1103.4	1248.0	1700.5	2118.3	2233.4	2305.7	2375.4	2386.1	2388.7
25°	388.3	554.3	1100.7	1272.1	1764.8	2163.8	2252.2	2305.7	2345.9	2351.3	2351.3
27.5°	348.1	498.1	1090.0	1277.4	1813.0	2174.5	2244.1	2281.6	2300.4	2311.1	2311.1
30°	313.3	444.5	1063.2	1266.7	1834.4	2163.8	2220.0	2238.8	2257.5	2273.6	2281.6
32.5°	286.5	393.6	1023.0	1245.3	1837.1	2137.0	2177.2	2187.9	2214.7	2252.2	2265.6
35°	262.4	342.8	977.4	1215.8	1821.0	2094.2	2121.0	2131.7	2185.2	2241.5	2260.2
37.5°	238.3	305.3	918.5	1165.0	1796.9	2043.3	2062.0	2080.8	2163.8	2230.7	2252.2
40°	214.2	273.1	848.9	1108.7	1759.4	1981.7	1997.8	2027.2	2137.0	2214.7	2236.1
42.5°	195.5	246.4	773.9	1049.8	1711.2	1912.1	1936.2	1979.0	2104.9	2187.9	2212.0
45°	179.4	219.6	693.6	969.4	1649.7	1839.8	1874.6	1933.5	2067.4	2147.7	2169.2
47.5°	163.3	200.8	610.6	886.4	1582.7	1767.5	1813.0	1879.9	2016.5	2094.2	2112.9
50°	150.0	182.1	527.5	798.0	1510.4	1689.8	1743.4	1813.0	1952.2	2024.6	2048.7
52.5°	139.2	166.0	449.9	709.6	1427.4	1609.5	1671.1	1743.4	1874.6	1944.2	1960.3
55°	128.5	152.6	382.9	615.9	1341.7	1523.8	1590.7	1660.4	1788.9	1847.8	1858.5
57.5°	123.2	141.9	326.7	527.5	1250.6	1427.4	1502.4	1566.6	1687.1	1732.7	1743.4
60°	115.1	133.9	283.9	452.6	1151.6	1336.3	1400.6	1464.9	1566.6	1604.1	1612.2
62.5°	107.1	128.5	251.7	380.3	1049.8	1229.2	1293.5	1352.4	1438.1	1464.9	1475.6
65°	101.8	123.2	227.6	326.7	945.3	1116.8	1181.0	1231.9	1301.5	1328.3	1333.7
67.5°	96.4	117.8	208.9	281.2	840.8	1004.2	1052.5	1100.7	1154.2	1181.0	1183.7
70°	88.4	112.5	192.8	249.0	733.7	875.7	915.8	966.7	1009.6	1023.0	1031.1
72.5°	83.0	104.4	182.1	224.9	623.9	752.5	790.0	819.4	856.9	870.3	870.3
75°	75.0	93.7	171.4	200.8	511.5	615.9	648.0	677.5	707.0	712.3	704.3
77.5°	66.9	83.0	147.3	168.7	399.0	487.4	514.1	530.2	554.3	559.7	562.4
80°	56.2	72.3	115.1	131.2	289.2	358.8	377.6	391.0	412.4	412.4	417.7
82.5°	42.8	56.2	83.0	93.7	195.5	246.4	262.4	270.5	283.9	283.9	283.9
85°	26.8	34.8	53.6	61.6	117.8	150.0	160.7	163.3	174.1	176.7	176.7
87.5°	13.4	18.7	34.8	37.5	61.6	77.7	77.7	83.0	83.0	80.3	77.7
90°	13.8	24.9	36.1	38.8	61.0	90.5	105.3	93.6	70.2	52.7	52.7
92.5°	55.4	149.7	244.0	267.6	376.2	521.0	593.4	520.0	373.4	263.4	253.0
95°	133.1	305.6	478.2	521.3	925.6	1464.9	1734.4	1547.7	1174.3	894.3	862.5
97.5°	230.1	382.3	534.6	572.6	1246.9	2145.9	2595.5	2477.5	2241.5	2064.5	2004.0
100°	305.0	443.1	581.1	615.6	1363.8	2361.5	2860.3	2869.0	2886.2	2899.1	2827.2
102.5°	368.8	497.6	626.4	658.6	1417.5	2429.3	2935.2	3085.5	3386.2	3611.8	3550.2
105°	476.9	586.0	695.1	722.4	1457.2	2436.9	2926.8	3263.9	3938.1	4443.6	4410.5
107.5°	587.9	689.5	791.2	816.7	1464.6	2328.6	2760.5	3230.7	4170.9	4876.2	4884.2
110°	662.8	754.5	846.4	869.3	1453.5	2232.4	2621.8	3147.5	4198.7	4987.2	5021.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	736.2	823.7	911.2	933.1	1453.9	2148.4	2495.7	3033.7	4109.5	4916.5	4969.5
115°	847.1	927.8	1008.6	1028.7	1467.4	2052.1	2344.6	2862.8	3899.2	4676.6	4750.1
117.5°	956.7	1030.0	1103.4	1121.7	1494.6	1991.9	2240.6	2708.3	3643.7	4345.2	4426.7
120°	1020.4	1089.4	1158.5	1175.8	1516.8	1971.6	2199.0	2626.4	3481.0	4122.0	4201.2
122.5°	1082.8	1152.5	1222.1	1239.5	1548.7	1961.0	2167.1	2551.9	3321.5	3898.8	3976.9
125°	1178.5	1242.0	1305.5	1321.3	1591.7	1952.2	2132.4	2459.3	3113.1	3603.4	3675.4
127.5°	1256.2	1320.3	1384.4	1400.3	1634.7	1947.1	2103.3	2383.9	2945.3	3366.3	3427.0
130°	1297.8	1366.8	1435.8	1453.0	1666.1	1950.2	2092.2	2342.1	2841.8	3216.6	3272.7
132.5°	1340.7	1409.7	1478.8	1496.0	1691.5	1952.2	2082.5	2306.2	2753.6	3089.1	3139.3
135°	1404.5	1467.4	1530.2	1545.9	1719.3	1950.4	2065.9	2253.2	2627.9	2908.9	2952.2
137.5°	1469.7	1531.9	1594.1	1609.7	1760.8	1962.3	2063.1	2221.5	2538.2	2775.7	2811.1
140°	1523.7	1581.0	1638.3	1652.7	1786.2	1964.3	2053.4	2190.1	2463.7	2668.9	2702.1
142.5°	1565.3	1618.3	1671.3	1684.6	1807.5	1971.4	2053.4	2173.5	2413.9	2594.1	2622.6
145°	1629.1	1675.4	1721.6	1733.1	1835.2	1971.4	2039.5	2137.8	2334.4	2481.8	2503.4
147.5°	1692.9	1737.8	1782.8	1794.1	1875.9	1985.0	2039.5	2116.8	2271.5	2387.5	2405.3
150°	1734.4	1775.2	1815.9	1826.0	1897.2	1992.1	2039.5	2104.9	2235.5	2333.4	2347.9
152.5°	1777.5	1808.3	1839.2	1846.8	1911.1	1996.7	2039.5	2095.3	2206.8	2290.5	2301.4
155°	1841.2	1864.1	1886.8	1892.5	1941.5	2006.9	2039.5	2083.9	2172.6	2239.1	2246.4
157.5°	1888.4	1910.6	1932.8	1938.3	1972.1	2017.1	2039.5	2074.0	2143.0	2194.8	2199.9
160°	1920.3	1937.5	1954.8	1959.1	1985.9	2021.7	2039.5	2069.1	2128.3	2172.6	2175.6
162.5°	1952.2	1965.1	1978.0	1981.3	2000.7	2026.6	2039.5	2064.5	2114.4	2151.8	2154.6
165°	1986.8	1998.5	2010.2	2013.1	2022.0	2033.7	2039.5	2057.4	2093.1	2119.9	2122.8
167.5°	2018.7	2024.3	2029.8	2031.2	2038.6	2048.5	2053.4	2065.1	2088.5	2106.0	2107.3
170°	2039.5	2045.1	2050.6	2052.0	2052.4	2053.0	2053.4	2065.1	2088.5	2106.0	2106.0
172.5°	2050.6	2051.9	2053.1	2053.4	2053.4	2053.4	2053.4	2062.7	2081.1	2095.0	2093.9
175°	2065.9	2065.9	2065.9	2065.9	2061.7	2056.2	2053.4	2059.3	2071.0	2079.7	2079.7
177.5°	2065.9	2065.9	2065.9	2065.9	2062.7	2058.3	2056.2	2060.8	2070.0	2076.9	2075.7
180°	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	832.8	832.8
2.5°	889.0	883.7
5°	1143.5	1148.9
7.5°	1539.9	1537.2
10°	1914.8	1938.9
12.5°	2187.9	2193.3
15°	2353.9	2364.6
17.5°	2418.2	2420.9
20°	2420.9	2415.5
22.5°	2391.4	2386.1
25°	2356.6	2353.9
27.5°	2324.5	2327.1
30°	2311.1	2319.1
32.5°	2311.1	2324.5
35°	2316.4	2329.8
37.5°	2313.8	2329.8
40°	2303.0	2321.8
42.5°	2273.6	2287.0
45°	2228.1	2244.1
47.5°	2169.2	2179.9
50°	2094.2	2104.9
52.5°	2000.5	2003.1
55°	1888.0	1898.7
57.5°	1767.5	1770.2
60°	1633.6	1641.6
62.5°	1491.7	1491.7
65°	1341.7	1347.1
67.5°	1186.4	1199.8
70°	1028.4	1031.1
72.5°	873.0	873.0
75°	712.3	715.0
77.5°	559.7	559.7
80°	415.1	417.7
82.5°	286.5	291.9
85°	179.4	179.4
87.5°	83.0	75.0
90°	52.7	52.7
92.5°	211.0	169.2
95°	735.6	608.7
97.5°	1762.5	1520.9
100°	2539.4	2251.6
102.5°	3303.7	3057.2
105°	4278.1	4145.6
107.5°	4916.3	4948.3
110°	5159.7	5297.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	5181.4	5393.4
115°	5044.0	5338.0
117.5°	4752.7	5078.7
120°	4517.9	4834.6
122.5°	4289.3	4601.7
125°	3963.1	4250.9
127.5°	3669.8	3912.6
130°	3497.0	3721.3
132.5°	3340.2	3541.0
135°	3125.2	3298.4
137.5°	2952.9	3094.6
140°	2834.6	2967.1
142.5°	2736.6	2850.6
145°	2589.6	2675.9
147.5°	2476.8	2548.3
150°	2405.9	2463.8
152.5°	2345.2	2388.9
155°	2275.4	2304.3
157.5°	2220.2	2240.6
160°	2187.3	2199.0
162.5°	2165.7	2176.7
165°	2134.5	2146.3
167.5°	2112.2	2117.1
170°	2106.0	2106.0
172.5°	2089.5	2085.2
175°	2079.7	2079.7
177.5°	2070.8	2065.9
180°	2065.9	2065.9



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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	2.44	3.18	3.52	4.27	5.77	15.63	16.37	16.72	17.46	18.96
	3H	3.13	3.80	4.23	4.90	6.42	17.46	18.13	18.56	19.23	20.75
	4H	3.42	4.06	4.53	5.16	6.68	18.11	18.74	19.21	19.84	21.36
	6H	3.67	4.25	4.78	5.36	6.89	18.54	19.12	19.65	20.22	21.76
	8H	3.73	4.29	4.85	5.41	6.94	18.65	19.21	19.78	20.33	21.86
	12H	3.75	4.27	4.87	5.39	6.94	18.72	19.25	19.85	20.36	21.92
4H	2H	9.64	10.28	10.76	11.38	12.90	15.89	16.52	17.00	17.62	19.14
	3H	11.20	11.73	12.32	12.86	14.39	17.93	18.46	19.05	19.59	21.12
	4H	11.29	11.78	12.42	12.89	14.45	18.69	19.18	19.82	20.30	21.85
	6H	11.29	11.71	12.43	12.85	14.40	19.23	19.65	20.36	20.79	22.33
	8H	11.27	11.66	12.40	12.79	14.35	19.39	19.78	20.52	20.91	22.48
	12H	11.22	11.57	12.37	12.72	14.28	19.48	19.84	20.63	20.98	22.55
8H	4H	12.73	13.12	13.86	14.25	15.81	18.74	19.13	19.87	20.27	21.83
	6H	12.96	13.29	14.12	14.46	16.02	19.37	19.69	20.52	20.87	22.43
	8H	12.98	13.26	14.14	14.42	16.00	19.59	19.87	20.75	21.03	22.61
	12H	12.94	13.19	14.11	14.34	15.96	19.73	19.98	20.90	21.13	22.75
12H	4H	12.87	13.22	14.02	14.37	15.93	18.69	19.04	19.84	20.19	21.76
	6H	13.22	13.51	14.38	14.66	16.24	19.35	19.64	20.51	20.79	22.37
	8H	13.29	13.54	14.45	14.69	16.30	19.58	19.83	20.74	20.98	22.59