

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: P938152

Luminaire Tested: SQ4-FB-125U-125D-930-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938152
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-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

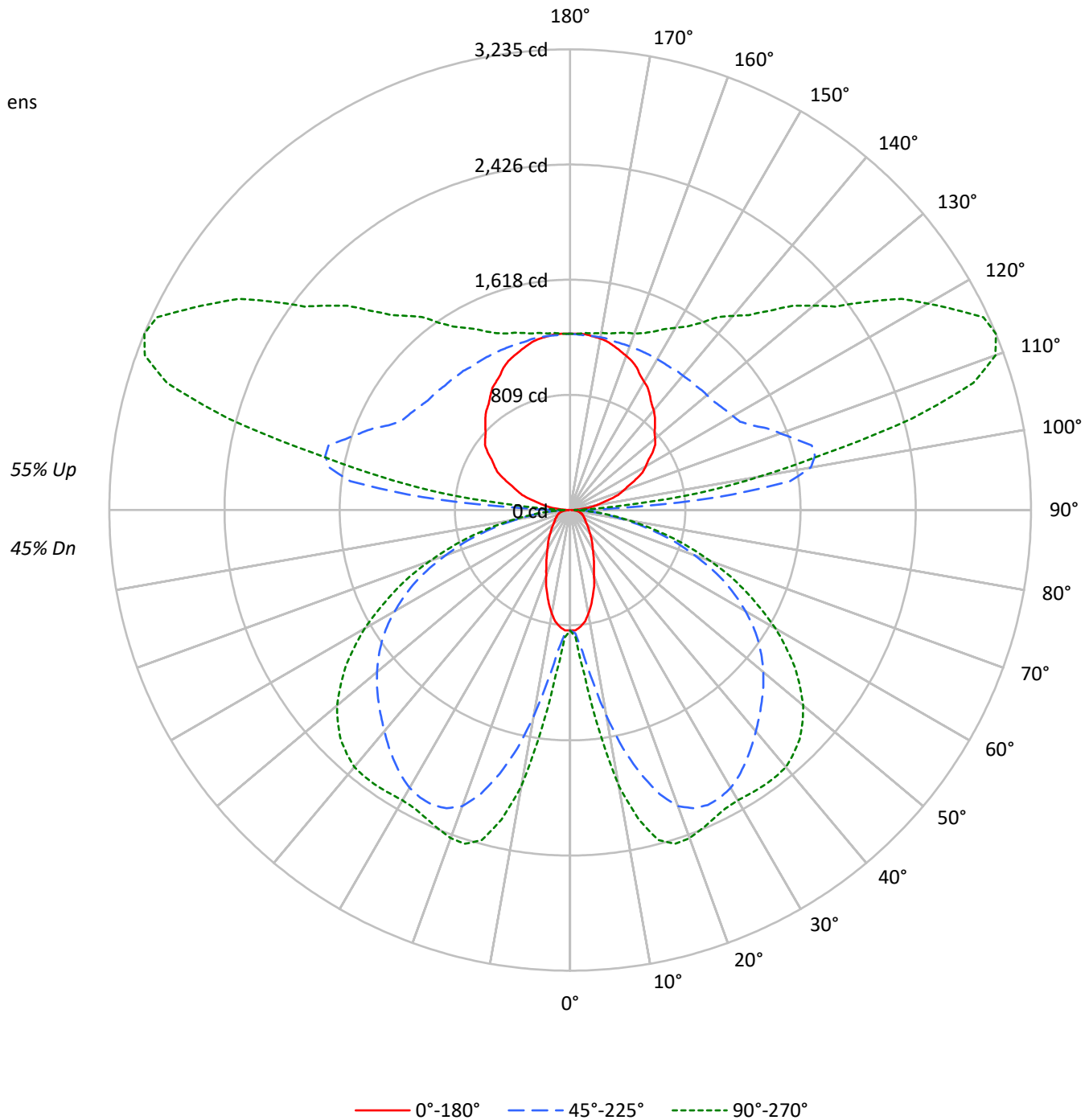
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14575.2 lumens
Efficiency: N/A
Efficacy: 96.9 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 (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

TEST NUMBER: P938152
CATALOG NUMBER: SQ4-FB-125U-125D-930-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P938152

CATALOG NUMBER: SQ4-FB-125U-125D-930-1D-UNV-STD-W-8

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°	3921	3921	3921
5°	3831	4533	5271
10°	3475	6607	8739
15°	2953	8632	10552
20°	2404	10003	10754
25°	2006	10468	10536
30°	1691	10534	10516
35°	1496	10359	10788
40°	1304	10132	11069
45°	1180	9965	11112
50°	1082	9815	10928
55°	1037	9596	10444
60°	1061	9174	9679
65°	1104	8534	8628
70°	1176	7442	7289
75°	1303	6068	5688
80°	1425	4208	3833
85°	1262	2233	1962

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11112 cd/sqm



TEST NUMBER: P938152

CATALOG NUMBER: SQ4-FB-125U-125D-930-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.3	0.8
10°-20°	484.6	3.3
20°-30°	847.6	5.8
30°-40°	1091.1	7.5
40°-50°	1218.7	8.4
50°-60°	1167.3	8.0
60°-70°	925.1	6.3
70°-80°	544.0	3.7
80°-90°	155.9	1.1
90°-100°	603.9	4.1
100°-110°	1587.8	10.9
110°-120°	1646.3	11.3
120°-130°	1320.6	9.1
130°-140°	1036.2	7.1
140°-150°	795.3	5.5
150°-160°	572.7	3.9
160°-170°	350.4	2.4
170°-180°	118.4	0.8
0°-30°	1441.5	9.9
0°-40°	2532.6	17.4
0°-60°	4918.7	33.7
0°-90°	6543.6	44.9
90°-120°	3838.1	26.3
90°-150°	6990.1	48.0
90°-180°	8032.0	55.1
0°-180°	14575.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	845	845	845	845	845	
5°	824	883	995	1125	1166	76
15°	617	1139	1919	2326	2400	172
25°	394	1291	2286	2386	2389	182
35°	266	1234	2152	2275	2364	166
45°	182	984	1902	2180	2278	141
55°	130	625	1614	1875	1927	119
65°	103	332	1199	1348	1367	102
75°	76	204	658	723	726	80
85°	27	62	163	179	182	29
90°	8	23	63	32	32	9
95°	80	313	1040	536	365	89
105°	286	433	1755	2665	2486	303
115°	508	617	1406	2805	3201	502
125°	707	792	1279	2161	2549	628
135°	842	927	1239	1744	1978	652
145°	977	1039	1223	1488	1605	612
155°	1104	1135	1223	1343	1382	507
165°	1192	1207	1223	1271	1287	336
175°	1239	1239	1232	1247	1247	118
180°	1239	1239	1239	1239	1239	



TEST NUMBER: P938152
 CATALOG NUMBER: SQ4-FB-125U-125D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2
2.5°	845.2	845.2	850.7	853.4	858.8	861.5	867.0	872.5	888.8	891.5	896.9
5°	823.5	834.4	869.7	883.3	921.4	973.0	994.8	1030.1	1103.4	1125.2	1138.7
7.5°	790.9	815.4	902.3	924.1	1019.2	1155.1	1212.1	1288.3	1405.1	1462.2	1508.4
10°	739.2	790.9	945.8	997.4	1152.4	1358.9	1464.9	1570.9	1747.6	1826.4	1856.3
12.5°	682.1	766.5	992.0	1062.7	1285.5	1587.2	1715.0	1831.8	2033.0	2139.0	2155.3
15°	616.9	731.1	1035.5	1138.7	1426.9	1777.4	1918.8	2062.8	2250.4	2326.5	2345.5
17.5°	559.9	703.9	1076.3	1185.0	1535.6	1948.7	2092.7	2212.3	2364.5	2416.1	2429.7
20°	489.2	660.5	1103.4	1244.7	1649.8	2073.7	2212.3	2304.7	2408.0	2440.6	2446.0
22.5°	437.6	614.2	1119.8	1266.5	1725.8	2149.8	2266.7	2340.0	2410.7	2421.6	2424.3
25°	394.1	562.6	1117.1	1291.0	1791.1	2196.0	2285.7	2340.0	2380.8	2386.3	2386.3
27.5°	353.3	505.5	1106.1	1296.4	1840.0	2206.9	2277.5	2315.6	2334.6	2345.5	2345.5
30°	318.0	451.1	1079.0	1285.5	1861.8	2196.0	2253.1	2272.1	2291.1	2307.4	2315.6
32.5°	290.8	399.5	1038.2	1263.8	1864.4	2168.8	2209.6	2220.5	2247.7	2285.7	2299.3
35°	266.4	347.9	992.0	1233.9	1848.1	2125.4	2152.5	2163.4	2217.7	2274.8	2293.8
37.5°	241.9	309.8	932.2	1182.3	1823.7	2073.7	2092.7	2111.7	2196.0	2264.0	2285.7
40°	217.5	277.2	861.5	1125.2	1785.6	2011.2	2027.5	2057.4	2168.8	2247.7	2269.4
42.5°	198.4	250.1	785.5	1065.4	1736.7	1940.5	1965.0	2008.5	2136.2	2220.5	2244.9
45°	182.1	222.8	703.9	983.8	1674.2	1867.1	1902.5	1962.3	2098.2	2179.7	2201.4
47.5°	165.8	203.8	619.7	899.6	1606.2	1793.7	1840.0	1907.9	2046.5	2125.4	2144.4
50°	152.2	184.9	535.4	809.9	1532.8	1715.0	1769.3	1840.0	1981.3	2054.7	2079.1
52.5°	141.3	168.5	456.6	720.2	1448.6	1633.4	1695.9	1769.3	1902.5	1973.1	1989.4
55°	130.5	154.9	388.7	625.1	1361.6	1546.4	1614.4	1685.1	1815.5	1875.3	1886.2
57.5°	125.0	144.1	331.6	535.4	1269.2	1448.6	1524.7	1589.9	1712.2	1758.4	1769.3
60°	116.8	135.9	288.1	459.3	1168.7	1356.2	1421.4	1486.7	1589.9	1628.0	1636.1
62.5°	108.7	130.5	255.5	385.9	1065.4	1247.5	1312.7	1372.5	1459.5	1486.7	1497.5
65°	103.3	125.0	231.0	331.6	959.4	1133.4	1198.6	1250.2	1320.9	1348.1	1353.5
67.5°	97.8	119.6	212.0	285.4	853.4	1019.2	1068.1	1117.1	1171.4	1198.6	1201.3
70°	89.7	114.2	195.7	252.8	744.7	888.8	929.5	981.1	1024.6	1038.2	1046.4
72.5°	84.2	106.0	184.9	228.3	633.2	763.7	801.8	831.7	869.7	883.3	883.3
75°	76.1	95.2	173.9	203.8	519.1	625.1	657.7	687.6	717.5	722.9	714.8
77.5°	67.9	84.2	149.5	171.2	405.0	494.6	521.8	538.2	562.6	568.0	570.8
80°	57.1	73.4	116.8	133.1	293.5	364.2	383.2	396.8	418.5	418.5	424.0
82.5°	43.5	57.1	84.2	95.2	198.4	250.1	266.4	274.5	288.1	288.1	288.1
85°	27.1	35.3	54.4	62.5	119.6	152.2	163.1	165.8	176.7	179.4	179.4
87.5°	13.6	19.0	35.3	38.1	62.5	78.9	78.9	84.2	84.2	81.5	78.9
90°	8.4	15.0	21.6	23.3	36.6	54.4	63.2	56.1	42.1	31.6	31.6
92.5°	33.2	89.8	146.4	160.5	225.6	312.4	355.9	311.9	224.0	158.0	151.7
95°	79.8	183.3	286.8	312.7	555.2	878.6	1040.2	928.3	704.3	536.3	517.3
97.5°	138.0	229.3	320.6	343.4	747.8	1287.0	1556.6	1485.9	1344.3	1238.1	1201.9
100°	182.9	265.7	348.5	369.2	817.9	1416.3	1715.4	1720.6	1730.9	1738.7	1695.6
102.5°	221.1	298.4	375.6	395.0	850.1	1457.0	1760.3	1850.5	2030.9	2166.1	2129.2
105°	286.0	351.5	416.8	433.2	873.9	1461.5	1755.4	1957.5	2361.8	2665.0	2645.2
107.5°	352.6	413.5	474.5	489.7	878.3	1396.5	1655.5	1937.6	2501.5	2924.4	2929.3
110°	397.5	452.6	507.7	521.4	871.7	1338.8	1572.4	1887.7	2518.1	2990.9	3011.7



TEST NUMBER: P938152

CATALOG NUMBER: SQ4-FB-125U-125D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	441.6	494.0	546.5	559.6	872.0	1288.5	1496.7	1819.4	2464.6	2948.5	2980.3
115°	508.1	556.5	604.8	616.9	880.0	1230.8	1406.1	1716.9	2338.5	2804.7	2848.8
117.5°	573.7	617.7	661.7	672.7	896.4	1194.6	1343.7	1624.2	2185.2	2606.0	2654.9
120°	612.0	653.4	694.8	705.1	909.6	1182.4	1318.8	1575.1	2087.6	2472.1	2519.6
122.5°	649.4	691.1	732.9	743.3	928.7	1176.0	1299.7	1530.4	1992.1	2338.3	2385.1
125°	706.8	744.9	782.9	792.4	954.5	1170.8	1278.9	1475.0	1867.1	2161.1	2204.2
127.5°	753.4	791.8	830.2	839.9	980.4	1167.7	1261.4	1429.7	1766.4	2018.9	2055.3
130°	778.3	819.7	861.1	871.4	999.2	1169.6	1254.8	1404.6	1704.4	1929.1	1962.8
132.5°	804.0	845.5	886.8	897.2	1014.4	1170.8	1248.9	1383.1	1651.4	1852.6	1882.7
135°	842.3	880.0	917.7	927.1	1031.1	1169.6	1238.9	1351.3	1576.0	1744.5	1770.5
137.5°	881.4	918.7	956.1	965.4	1056.0	1176.9	1237.3	1332.3	1522.2	1664.7	1686.0
140°	913.8	948.2	982.6	991.1	1071.3	1178.1	1231.5	1313.5	1477.6	1600.7	1620.5
142.5°	938.8	970.6	1002.3	1010.3	1084.0	1182.3	1231.5	1303.5	1447.6	1555.7	1572.8
145°	977.0	1004.7	1032.5	1039.4	1100.7	1182.3	1223.1	1282.1	1400.0	1488.4	1501.4
147.5°	1015.3	1042.3	1069.3	1076.0	1125.1	1190.4	1223.1	1269.5	1362.3	1431.9	1442.6
150°	1040.2	1064.6	1089.0	1095.1	1137.8	1194.7	1223.1	1262.3	1340.7	1399.5	1408.1
152.5°	1066.0	1084.5	1102.9	1107.6	1146.1	1197.4	1223.1	1256.6	1323.5	1373.7	1380.3
155°	1104.3	1117.9	1131.6	1135.0	1164.4	1203.5	1223.1	1249.8	1303.0	1342.9	1347.3
157.5°	1132.6	1145.8	1159.1	1162.4	1182.7	1209.6	1223.1	1243.8	1285.2	1316.3	1319.3
160°	1151.7	1162.0	1172.4	1174.9	1191.0	1212.4	1223.1	1240.9	1276.4	1302.9	1304.7
162.5°	1170.8	1178.5	1186.3	1188.2	1199.8	1215.3	1223.1	1238.1	1268.0	1290.5	1292.2
165°	1191.6	1198.6	1205.6	1207.4	1212.6	1219.6	1223.1	1233.9	1255.3	1271.4	1273.2
167.5°	1210.7	1214.0	1217.3	1218.2	1222.6	1228.5	1231.5	1238.5	1252.5	1263.0	1263.8
170°	1223.1	1226.5	1229.9	1230.7	1230.9	1231.3	1231.5	1238.5	1252.5	1263.0	1263.0
172.5°	1229.8	1230.5	1231.3	1231.5	1231.5	1231.5	1231.5	1237.0	1248.1	1256.5	1255.8
175°	1238.9	1238.9	1238.9	1238.9	1236.5	1233.2	1231.5	1235.0	1242.0	1247.3	1247.3
177.5°	1238.9	1238.9	1238.9	1238.9	1237.0	1234.5	1233.2	1235.9	1241.4	1245.6	1244.9
180°	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9



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CATALOG NUMBER: SQ4-FB-125U-125D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	845.2	845.2
2.5°	902.3	896.9
5°	1160.5	1166.0
7.5°	1562.7	1560.1
10°	1943.3	1967.8
12.5°	2220.5	2225.9
15°	2389.0	2399.8
17.5°	2454.2	2456.9
20°	2456.9	2451.5
22.5°	2427.1	2421.6
25°	2391.7	2389.0
27.5°	2359.1	2361.8
30°	2345.5	2353.7
32.5°	2345.5	2359.1
35°	2350.9	2364.5
37.5°	2348.2	2364.5
40°	2337.4	2356.4
42.5°	2307.4	2321.1
45°	2261.2	2277.5
47.5°	2201.4	2212.3
50°	2125.4	2136.2
52.5°	2030.2	2033.0
55°	1916.0	1927.0
57.5°	1793.7	1796.5
60°	1657.9	1666.1
62.5°	1513.8	1513.8
65°	1361.6	1367.1
67.5°	1204.0	1217.6
70°	1043.7	1046.4
72.5°	886.0	886.0
75°	722.9	725.7
77.5°	568.0	568.0
80°	421.3	424.0
82.5°	290.8	296.2
85°	182.1	182.1
87.5°	84.2	76.1
90°	31.6	31.6
92.5°	126.6	101.4
95°	441.2	365.0
97.5°	1057.1	912.2
100°	1523.0	1350.4
102.5°	1981.3	1833.5
105°	2565.7	2486.2
107.5°	2948.5	2967.6
110°	3094.4	3177.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3107.4	3234.6
115°	3025.1	3201.3
117.5°	2850.3	3045.9
120°	2709.6	2899.5
122.5°	2572.5	2759.8
125°	2376.9	2549.4
127.5°	2200.9	2346.5
130°	2097.3	2231.8
132.5°	2003.2	2123.7
135°	1874.4	1978.2
137.5°	1770.9	1856.0
140°	1700.0	1779.4
142.5°	1641.2	1709.6
145°	1553.1	1604.8
147.5°	1485.5	1528.3
150°	1442.9	1477.6
152.5°	1406.5	1432.7
155°	1364.6	1382.0
157.5°	1331.5	1343.7
160°	1311.7	1318.8
162.5°	1298.9	1305.5
165°	1280.1	1287.2
167.5°	1266.7	1269.7
170°	1263.0	1263.0
172.5°	1253.2	1250.6
175°	1247.3	1247.3
177.5°	1241.9	1238.9
180°	1238.9	1238.9



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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	5.27	6.12	6.26	7.13	8.47	18.45	19.30	19.44	20.31	21.65
	3H	5.97	6.74	6.98	7.76	9.12	20.29	21.05	21.29	22.07	23.43
	4H	6.27	7.00	7.29	8.02	9.38	20.93	21.65	21.95	22.68	24.04
	6H	6.52	7.19	7.55	8.22	9.60	21.36	22.03	22.39	23.05	24.43
	8H	6.59	7.23	7.62	8.27	9.64	21.48	22.12	22.51	23.16	24.54
	12H	6.61	7.21	7.64	8.25	9.65	21.55	22.15	22.59	23.19	24.59
4H	2H	12.48	13.21	13.50	14.23	15.60	18.72	19.44	19.74	20.47	21.83
	3H	14.05	14.66	15.08	15.70	17.09	20.76	21.37	21.80	22.42	23.80
	4H	14.14	14.70	15.18	15.74	17.14	21.53	22.09	22.57	23.13	24.53
	6H	14.15	14.63	15.20	15.70	17.10	22.07	22.55	23.12	23.61	25.01
	8H	14.13	14.58	15.18	15.64	17.05	22.23	22.68	23.28	23.74	25.15
	12H	14.09	14.49	15.15	15.56	16.98	22.32	22.73	23.39	23.80	25.22
8H	4H	15.59	16.04	16.64	17.09	18.51	21.59	22.04	22.64	23.10	24.51
	6H	15.83	16.20	16.90	17.30	18.71	22.22	22.59	23.29	23.69	25.10
	8H	15.85	16.17	16.93	17.26	18.69	22.44	22.77	23.52	23.85	25.28
	12H	15.81	16.10	16.90	17.18	18.65	22.58	22.87	23.67	23.95	25.42
12H	4H	15.73	16.14	16.80	17.21	18.63	21.54	21.95	22.61	23.02	24.44
	6H	16.09	16.41	17.17	17.50	18.93	22.20	22.53	23.28	23.61	25.04
	8H	16.16	16.44	17.24	17.52	18.99	22.43	22.72	23.52	23.80	25.27