

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: P938167

Luminaire Tested: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-8-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938167
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-93050-1D-UNV-STD-W-8-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

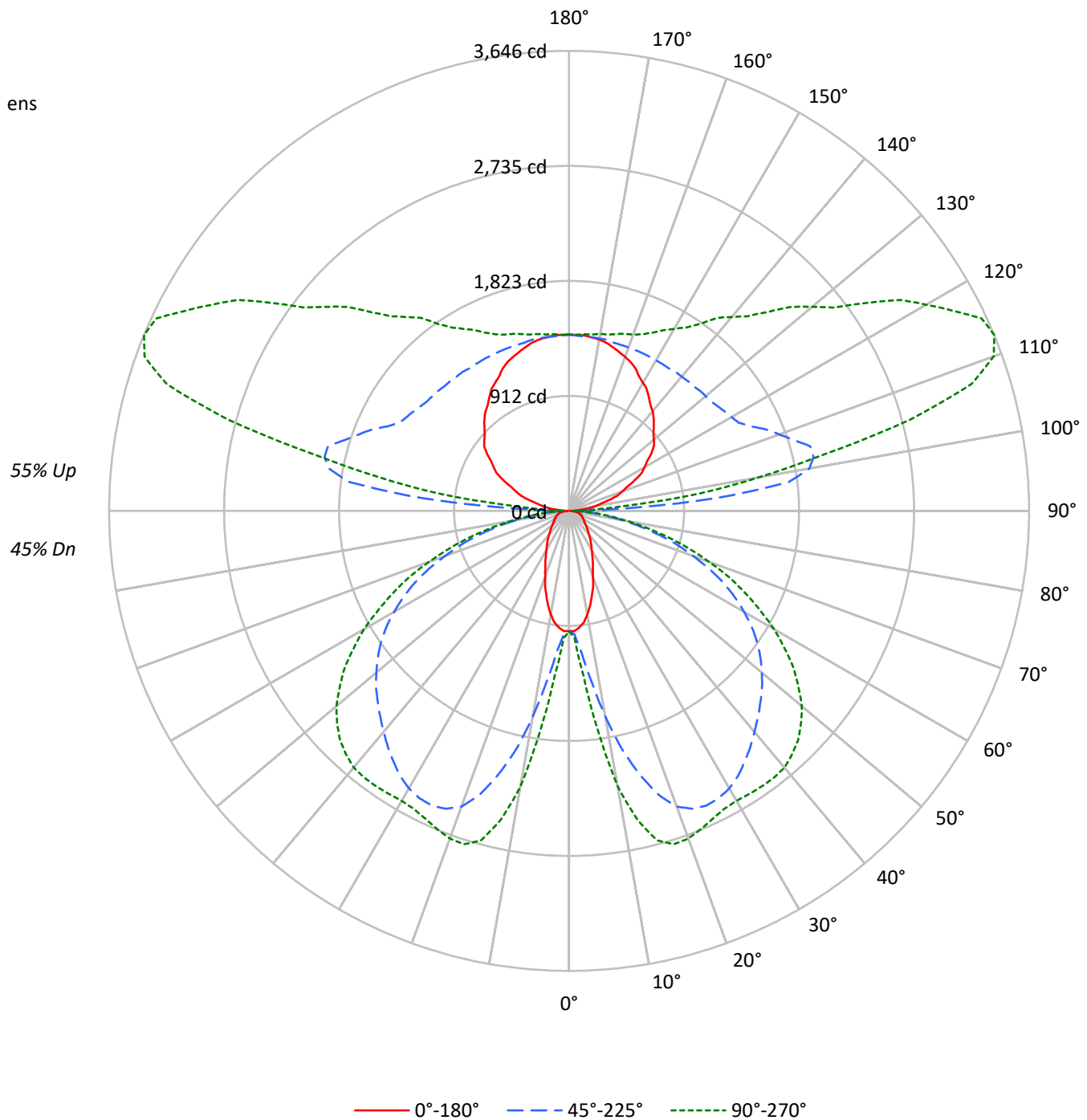
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16429.6 lumens
Efficiency: N/A
Efficacy: 109.2 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

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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	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42	37
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4421	4421	4421
5°	4318	5109	5942
10°	3917	7448	9851
15°	3329	9730	11895
20°	2710	11276	12122
25°	2261	11800	11876
30°	1906	11874	11854
35°	1686	11677	12160
40°	1469	11420	12477
45°	1330	11233	12526
50°	1220	11064	12319
55°	1169	10817	11772
60°	1196	10341	10910
65°	1245	9619	9726
70°	1326	8389	8216
75°	1470	6840	6412
80°	1607	4743	4320
85°	1425	2517	2212

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12526 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.2	0.8
10°-20°	546.2	3.3
20°-30°	955.5	5.8
30°-40°	1229.9	7.5
40°-50°	1373.8	8.4
50°-60°	1315.8	8.0
60°-70°	1042.8	6.3
70°-80°	613.2	3.7
80°-90°	175.7	1.1
90°-100°	680.8	4.1
100°-110°	1789.8	10.9
110°-120°	1855.8	11.3
120°-130°	1488.6	9.1
130°-140°	1168.0	7.1
140°-150°	896.5	5.5
150°-160°	645.6	3.9
160°-170°	395.0	2.4
170°-180°	133.5	0.8
0°-30°	1624.9	9.9
0°-40°	2854.9	17.4
0°-60°	5544.4	33.7
0°-90°	7376.1	44.9
90°-120°	4326.4	26.3
90°-150°	7879.4	48.0
90°-180°	9054.0	55.1
0°-180°	16429.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	953	953	953	953	953	
5°	928	996	1121	1268	1314	86
15°	695	1284	2163	2622	2705	194
25°	444	1455	2576	2690	2693	205
35°	300	1391	2426	2564	2665	187
45°	205	1109	2144	2457	2567	159
55°	147	705	1820	2114	2172	134
65°	116	374	1351	1520	1541	115
75°	86	230	741	815	818	90
85°	31	70	184	202	205	33
90°	9	26	71	36	36	10
95°	90	352	1172	605	412	100
105°	322	488	1979	3004	2803	342
115°	573	695	1585	3162	3609	566
125°	797	893	1442	2436	2874	707
135°	950	1045	1397	1966	2230	735
145°	1101	1172	1379	1678	1809	690
155°	1245	1279	1379	1514	1558	572
165°	1343	1361	1379	1433	1451	379
175°	1397	1397	1388	1406	1406	133
180°	1397	1397	1397	1397	1397	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8
2.5°	952.8	952.8	958.9	962.0	968.1	971.1	977.3	983.5	1001.8	1004.9	1011.0
5°	928.2	940.6	980.4	995.7	1038.6	1096.8	1121.3	1161.1	1243.8	1268.3	1283.6
7.5°	891.5	919.1	1017.1	1041.7	1148.8	1302.1	1366.3	1452.1	1583.9	1648.2	1700.3
10°	833.3	891.5	1066.1	1124.3	1299.0	1531.8	1651.3	1770.8	1969.9	2058.8	2092.5
12.5°	768.9	864.0	1118.2	1197.9	1449.1	1789.1	1933.2	2064.9	2291.6	2411.1	2429.5
15°	695.4	824.1	1167.2	1283.6	1608.4	2003.6	2162.9	2325.3	2536.7	2622.4	2643.9
17.5°	631.1	793.5	1213.2	1335.7	1730.9	2196.6	2358.9	2493.8	2665.3	2723.5	2738.8
20°	551.4	744.5	1243.8	1403.1	1859.7	2337.6	2493.8	2597.9	2714.4	2751.1	2757.2
22.5°	493.2	692.4	1262.2	1427.6	1945.4	2423.3	2555.1	2637.7	2717.4	2729.7	2732.8
25°	444.3	634.2	1259.2	1455.2	2019.0	2475.4	2576.5	2637.7	2683.7	2689.9	2689.9
27.5°	398.3	569.8	1246.9	1461.4	2074.1	2487.7	2567.3	2610.2	2631.7	2643.9	2643.9
30°	358.4	508.5	1216.3	1449.1	2098.6	2475.4	2539.7	2561.2	2582.6	2601.0	2610.2
32.5°	327.8	450.3	1170.3	1424.5	2101.6	2444.7	2490.7	2503.0	2533.6	2576.5	2591.8
35°	300.2	392.1	1118.2	1390.9	2083.2	2395.8	2426.4	2438.6	2499.9	2564.2	2585.7
37.5°	272.6	349.2	1050.8	1332.7	2055.7	2337.6	2358.9	2380.4	2475.4	2552.0	2576.5
40°	245.1	312.5	971.1	1268.3	2012.8	2267.1	2285.4	2319.1	2444.7	2533.6	2558.1
42.5°	223.7	281.9	885.4	1201.0	1957.7	2187.4	2215.0	2264.0	2408.0	2503.0	2530.6
45°	205.3	251.2	793.5	1109.0	1887.2	2104.7	2144.5	2211.9	2365.1	2457.1	2481.5
47.5°	186.9	229.7	698.5	1014.1	1810.6	2021.9	2074.1	2150.7	2306.9	2395.8	2417.2
50°	171.5	208.4	603.6	912.9	1727.9	1933.2	1994.4	2074.1	2233.4	2316.1	2343.6
52.5°	159.3	189.9	514.7	811.8	1632.9	1841.2	1911.7	1994.4	2144.5	2224.2	2242.5
55°	147.1	174.6	438.1	704.7	1534.9	1743.2	1819.8	1899.5	2046.5	2113.9	2126.1
57.5°	140.9	162.4	373.7	603.6	1430.7	1632.9	1718.7	1792.2	1930.1	1982.1	1994.4
60°	131.7	153.2	324.8	517.8	1317.4	1528.7	1602.2	1675.8	1792.2	1835.1	1844.3
62.5°	122.6	147.1	288.0	435.0	1201.0	1406.2	1479.8	1547.1	1645.1	1675.8	1688.0
65°	116.4	140.9	260.4	373.7	1081.5	1277.5	1351.0	1409.2	1488.9	1519.6	1525.6
67.5°	110.2	134.8	239.0	321.7	962.0	1148.8	1204.0	1259.2	1320.4	1351.0	1354.1
70°	101.1	128.7	220.6	284.9	839.4	1001.8	1047.7	1105.9	1155.0	1170.3	1179.5
72.5°	95.0	119.5	208.4	257.3	713.8	860.9	903.8	937.5	980.4	995.7	995.7
75°	85.8	107.3	196.1	229.7	585.2	704.7	741.4	775.1	808.8	814.9	805.8
77.5°	76.6	95.0	168.5	193.0	456.5	557.6	588.2	606.6	634.2	640.3	643.4
80°	64.4	82.7	131.7	150.1	330.8	410.5	431.9	447.3	471.8	471.8	477.9
82.5°	49.1	64.4	95.0	107.3	223.7	281.9	300.2	309.4	324.8	324.8	324.8
85°	30.6	39.8	61.3	70.4	134.8	171.5	183.8	186.9	199.1	202.2	202.2
87.5°	15.3	21.5	39.8	42.9	70.4	88.9	88.9	95.0	95.0	91.9	88.9
90°	9.4	16.9	24.3	26.2	41.3	61.3	71.2	63.3	47.4	35.6	35.6
92.5°	37.5	101.2	165.0	180.9	254.4	352.2	401.2	351.6	252.4	178.0	171.0
95°	90.0	206.6	323.3	352.5	625.8	990.3	1172.5	1046.4	793.9	604.6	583.1
97.5°	155.6	258.5	361.4	387.1	843.0	1450.8	1754.7	1674.9	1515.3	1395.7	1354.8
100°	206.2	299.5	392.8	416.2	922.0	1596.4	1933.7	1939.5	1951.2	1959.9	1911.3
102.5°	249.3	336.4	423.4	445.2	958.3	1642.3	1984.3	2085.9	2289.2	2441.7	2400.0
105°	322.4	396.2	469.9	488.3	985.1	1647.5	1978.7	2206.5	2662.3	3004.0	2981.7
107.5°	397.5	466.2	534.9	552.1	990.1	1574.2	1866.2	2184.1	2819.8	3296.5	3301.9
110°	448.1	510.1	572.2	587.7	982.6	1509.2	1772.5	2127.9	2838.5	3371.5	3394.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	497.7	556.9	616.1	630.8	982.9	1452.4	1687.1	2050.8	2778.1	3323.7	3359.5
115°	572.7	627.3	681.8	695.4	992.0	1387.3	1585.0	1935.3	2636.0	3161.5	3211.2
117.5°	646.7	696.3	745.9	758.3	1010.4	1346.6	1514.7	1830.9	2463.2	2937.5	2992.6
120°	689.8	736.5	783.1	794.8	1025.4	1332.8	1486.5	1775.5	2353.2	2786.6	2840.1
122.5°	732.0	779.1	826.1	837.9	1046.9	1325.6	1465.0	1725.1	2245.5	2635.7	2688.5
125°	796.7	839.6	882.5	893.2	1076.0	1319.7	1441.6	1662.6	2104.6	2436.1	2484.7
127.5°	849.2	892.6	935.8	946.7	1105.1	1316.3	1421.9	1611.6	1991.2	2275.8	2316.8
130°	877.3	924.0	970.6	982.3	1126.3	1318.4	1414.4	1583.3	1921.2	2174.6	2212.5
132.5°	906.3	953.0	999.7	1011.3	1143.5	1319.7	1407.8	1559.0	1861.5	2088.3	2122.2
135°	949.5	992.0	1034.5	1045.1	1162.2	1318.5	1396.6	1523.2	1776.5	1966.5	1995.7
137.5°	993.5	1035.6	1077.7	1088.2	1190.4	1326.6	1394.7	1501.8	1715.9	1876.5	1900.5
140°	1030.1	1068.8	1107.6	1117.2	1207.6	1328.0	1388.2	1480.7	1665.6	1804.3	1826.7
142.5°	1058.2	1094.1	1129.8	1138.8	1221.9	1332.8	1388.2	1469.3	1631.8	1753.7	1772.9
145°	1101.3	1132.5	1163.9	1171.6	1240.7	1332.8	1378.7	1445.2	1578.1	1677.8	1692.4
147.5°	1144.5	1174.9	1205.3	1212.9	1268.2	1341.9	1378.7	1431.1	1535.6	1614.1	1626.1
150°	1172.5	1200.1	1227.6	1234.5	1282.5	1346.7	1378.7	1422.9	1511.3	1577.5	1587.3
152.5°	1201.6	1222.4	1243.2	1248.5	1291.9	1349.8	1378.7	1416.5	1491.9	1548.5	1555.9
155°	1244.8	1260.2	1275.6	1279.4	1312.6	1356.7	1378.7	1408.8	1468.8	1513.8	1518.7
157.5°	1276.6	1291.6	1306.6	1310.3	1333.1	1363.5	1378.7	1402.1	1448.7	1483.7	1487.2
160°	1298.2	1309.9	1321.5	1324.4	1342.5	1366.7	1378.7	1398.7	1438.8	1468.7	1470.7
162.5°	1319.7	1328.4	1337.2	1339.4	1352.5	1370.0	1378.7	1395.6	1429.3	1454.7	1456.6
165°	1343.2	1351.1	1359.0	1361.0	1366.9	1374.8	1378.7	1390.9	1415.0	1433.1	1435.1
167.5°	1364.7	1368.4	1372.2	1373.1	1378.1	1384.8	1388.2	1396.0	1411.9	1423.7	1424.5
170°	1378.7	1382.5	1386.3	1387.2	1387.5	1388.0	1388.2	1396.0	1411.9	1423.7	1423.7
172.5°	1386.3	1387.1	1388.0	1388.2	1388.2	1388.2	1388.2	1394.4	1406.9	1416.3	1415.6
175°	1396.6	1396.6	1396.6	1396.6	1393.8	1390.1	1388.2	1392.1	1400.0	1406.0	1406.0
177.5°	1396.6	1396.6	1396.6	1396.6	1394.4	1391.5	1390.1	1393.1	1399.4	1404.1	1403.3
180°	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	952.8	952.8
2.5°	1017.1	1011.0
5°	1308.1	1314.3
7.5°	1761.5	1758.5
10°	2190.5	2218.1
12.5°	2503.0	2509.1
15°	2692.9	2705.2
17.5°	2766.4	2769.5
20°	2769.5	2763.4
22.5°	2735.8	2729.7
25°	2696.0	2692.9
27.5°	2659.2	2662.3
30°	2643.9	2653.1
32.5°	2643.9	2659.2
35°	2650.0	2665.3
37.5°	2647.0	2665.3
40°	2634.7	2656.2
42.5°	2601.0	2616.4
45°	2548.9	2567.3
47.5°	2481.5	2493.8
50°	2395.8	2408.0
52.5°	2288.5	2291.6
55°	2159.8	2172.1
57.5°	2021.9	2025.0
60°	1868.8	1878.0
62.5°	1706.4	1706.4
65°	1534.9	1541.0
67.5°	1357.2	1372.5
70°	1176.4	1179.5
72.5°	998.8	998.8
75°	814.9	818.0
77.5°	640.3	640.3
80°	474.8	477.9
82.5°	327.8	333.9
85°	205.3	205.3
87.5°	95.0	85.8
90°	35.6	35.6
92.5°	142.7	114.3
95°	497.3	411.5
97.5°	1191.6	1028.3
100°	1716.7	1522.2
102.5°	2233.4	2066.8
105°	2892.1	2802.6
107.5°	3323.6	3345.2
110°	3488.1	3581.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3502.8	3646.1
115°	3409.9	3608.6
117.5°	3213.0	3433.4
120°	3054.3	3268.4
122.5°	2899.8	3110.9
125°	2679.3	2873.8
127.5°	2481.0	2645.1
130°	2364.1	2515.7
132.5°	2258.1	2393.9
135°	2112.8	2229.9
137.5°	1996.2	2092.1
140°	1916.3	2005.8
142.5°	1850.0	1927.1
145°	1750.7	1809.0
147.5°	1674.5	1722.8
150°	1626.5	1665.6
152.5°	1585.4	1615.0
155°	1538.2	1557.8
157.5°	1500.9	1514.7
160°	1478.6	1486.5
162.5°	1464.1	1471.6
165°	1443.0	1451.0
167.5°	1427.9	1431.2
170°	1423.7	1423.7
172.5°	1412.6	1409.7
175°	1406.0	1406.0
177.5°	1399.9	1396.6
180°	1396.6	1396.6



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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	5.68	6.53	6.68	7.54	8.88	18.86	19.71	19.85	20.72	22.06
	3H	6.39	7.15	7.39	8.17	9.53	20.70	21.47	21.70	22.48	23.84
	4H	6.69	7.41	7.70	8.43	9.80	21.35	22.07	22.36	23.09	24.46
	6H	6.94	7.61	7.96	8.63	10.01	21.78	22.44	22.80	23.47	24.85
	8H	7.00	7.64	8.04	8.68	10.06	21.90	22.53	22.93	23.58	24.95
	12H	7.02	7.63	8.06	8.66	10.07	21.96	22.57	23.00	23.61	25.01
4H	2H	12.90	13.62	13.92	14.64	16.01	19.14	19.86	20.16	20.88	22.25
	3H	14.46	15.07	15.50	16.12	17.50	21.18	21.79	22.21	22.84	24.22
	4H	14.56	15.12	15.60	16.16	17.56	21.95	22.50	22.99	23.54	24.95
	6H	14.57	15.05	15.62	16.11	17.51	22.49	22.97	23.53	24.03	25.43
	8H	14.55	14.99	15.60	16.05	17.47	22.65	23.10	23.70	24.15	25.57
	12H	14.50	14.91	15.57	15.98	17.40	22.74	23.15	23.81	24.22	25.64
8H	4H	16.00	16.45	17.05	17.51	18.92	22.01	22.45	23.06	23.51	24.93
	6H	16.24	16.62	17.32	17.71	19.13	22.64	23.01	23.71	24.11	25.52
	8H	16.26	16.59	17.34	17.67	19.10	22.85	23.18	23.94	24.26	25.70
	12H	16.23	16.52	17.32	17.60	19.07	23.00	23.29	24.08	24.36	25.84
12H	4H	16.15	16.55	17.21	17.62	19.04	21.96	22.36	23.03	23.44	24.86
	6H	16.50	16.83	17.58	17.91	19.34	22.62	22.95	23.70	24.03	25.46
	8H	16.57	16.86	17.66	17.94	19.41	22.85	23.14	23.93	24.21	25.68