

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: P937916

Luminaire Tested: SQ4-FB-125U-075D-835-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937916
REPORT IS A COMBINATION OF REPORTS P933614 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-075D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

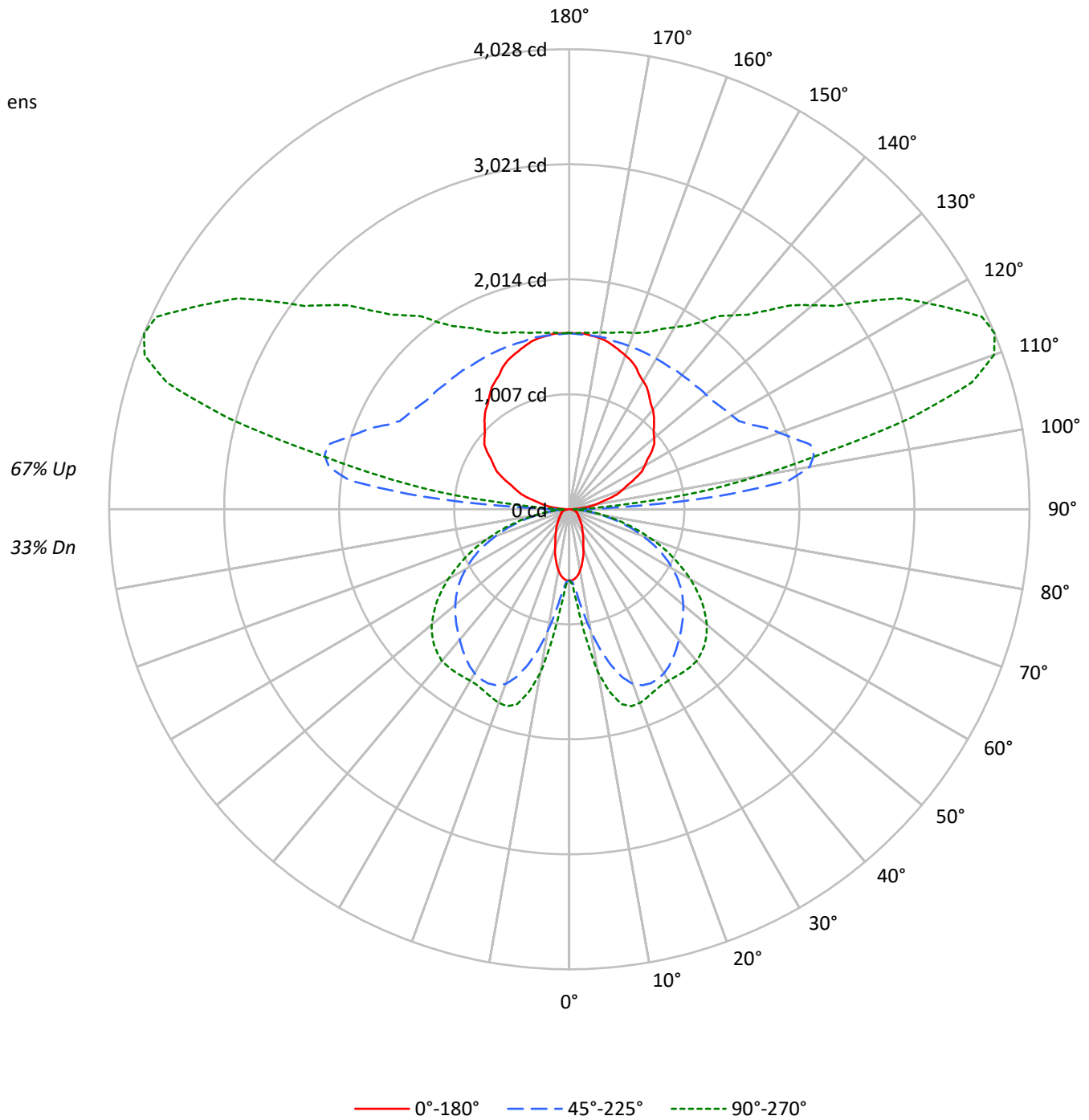
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14820.0 lumens
Efficiency: N/A
Efficacy: 133.3 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: Semi-Indirect

Input Watts (W): 111.2
Input Voltage (V): NR
Input Current (Ain): 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	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°	2886	2886	2886
5°	2819	3335	3879
10°	2557	4862	6431
15°	2173	6353	7766
20°	1769	7362	7914
25°	1476	7703	7753
30°	1245	7752	7739
35°	1100	7623	7939
40°	959	7456	8146
45°	868	7334	8178
50°	797	7223	8042
55°	763	7062	7686
60°	781	6751	7123
65°	813	6280	6349
70°	866	5477	5364
75°	959	4465	4186
80°	1048	3097	2820
85°	932	1643	1444

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8178 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.5	0.5
10°-20°	356.6	2.4
20°-30°	623.8	4.2
30°-40°	803.0	5.4
40°-50°	896.9	6.1
50°-60°	859.0	5.8
60°-70°	680.7	4.6
70°-80°	400.3	2.7
80°-90°	117.1	0.8
90°-100°	752.1	5.1
100°-110°	1977.3	13.3
110°-120°	2050.2	13.8
120°-130°	1644.5	11.1
130°-140°	1290.4	8.7
140°-150°	990.4	6.7
150°-160°	713.3	4.8
160°-170°	436.4	2.9
170°-180°	147.4	1.0
0°-30°	1060.8	7.2
0°-40°	1863.8	12.6
0°-60°	3619.7	24.4
0°-90°	4817.9	32.5
90°-120°	4779.7	32.3
90°-150°	8705.0	58.7
90°-180°	10002.0	67.5
0°-180°	14820.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	622	622	622	622	622	
5°	606	650	732	828	858	56
15°	454	838	1412	1712	1766	126
25°	290	950	1682	1756	1758	134
35°	196	908	1584	1674	1740	122
45°	134	724	1400	1604	1676	104
55°	96	460	1188	1380	1418	87
65°	76	244	882	992	1006	75
75°	56	150	484	532	534	59
85°	20	46	120	132	134	21
90°	10	29	79	39	39	10
95°	99	389	1295	668	455	110
105°	356	540	2186	3319	3096	378
115°	633	768	1751	3493	3987	625
125°	880	987	1593	2691	3175	781
135°	1049	1155	1543	2172	2464	812
145°	1217	1294	1523	1854	1998	762
155°	1375	1414	1523	1672	1721	632
165°	1484	1504	1523	1583	1603	419
175°	1543	1543	1534	1553	1553	146
180°	1543	1543	1543	1543	1543	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0
2.5°	622.0	622.0	626.0	628.0	632.0	634.0	638.0	642.0	654.0	656.0	660.0
5°	606.0	614.0	640.0	650.0	678.0	716.0	732.0	758.0	812.0	828.0	838.0
7.5°	582.0	600.0	664.0	680.0	750.0	850.0	892.0	948.0	1034.0	1076.0	1110.0
10°	544.0	582.0	696.0	734.0	848.0	1000.0	1078.0	1156.1	1286.1	1344.1	1366.1
12.5°	502.0	564.0	730.0	782.0	946.0	1168.1	1262.1	1348.1	1496.1	1574.1	1586.1
15°	454.0	538.0	762.0	838.0	1050.0	1308.1	1412.1	1518.1	1656.1	1712.1	1726.1
17.5°	412.0	518.0	792.0	872.0	1130.0	1434.1	1540.1	1628.1	1740.1	1778.1	1788.1
20°	360.0	486.0	812.0	916.0	1214.1	1526.1	1628.1	1696.1	1772.1	1796.1	1800.1
22.5°	322.0	452.0	824.0	932.0	1270.1	1582.1	1668.1	1722.1	1774.1	1782.1	1784.1
25°	290.0	414.0	822.0	950.0	1318.1	1616.1	1682.1	1722.1	1752.1	1756.1	1756.1
27.5°	260.0	372.0	814.0	954.0	1354.1	1624.1	1676.1	1704.1	1718.1	1726.1	1726.1
30°	234.0	332.0	794.0	946.0	1370.1	1616.1	1658.1	1672.1	1686.1	1698.1	1704.1
32.5°	214.0	294.0	764.0	930.0	1372.1	1596.1	1626.1	1634.1	1654.1	1682.1	1692.1
35°	196.0	256.0	730.0	908.0	1360.1	1564.1	1584.1	1592.1	1632.1	1674.1	1688.1
37.5°	178.0	228.0	686.0	870.0	1342.1	1526.1	1540.1	1554.1	1616.1	1666.1	1682.1
40°	160.0	204.0	634.0	828.0	1314.1	1480.1	1492.1	1514.1	1596.1	1654.1	1670.1
42.5°	146.0	184.0	578.0	784.0	1278.1	1428.1	1446.1	1478.1	1572.1	1634.1	1652.1
45°	134.0	164.0	518.0	724.0	1232.1	1374.1	1400.1	1444.1	1544.1	1604.1	1620.1
47.5°	122.0	150.0	456.0	662.0	1182.1	1320.1	1354.1	1404.1	1506.1	1564.1	1578.1
50°	112.0	136.0	394.0	596.0	1128.0	1262.1	1302.1	1354.1	1458.1	1512.1	1530.1
52.5°	104.0	124.0	336.0	530.0	1066.0	1202.1	1248.1	1302.1	1400.1	1452.1	1464.1
55°	96.0	114.0	286.0	460.0	1002.0	1138.1	1188.1	1240.1	1336.1	1380.1	1388.1
57.5°	92.0	106.0	244.0	394.0	934.0	1066.0	1122.0	1170.1	1260.1	1294.1	1302.1
60°	86.0	100.0	212.0	338.0	860.0	998.0	1046.0	1094.0	1170.1	1198.1	1204.1
62.5°	80.0	96.0	188.0	284.0	784.0	918.0	966.0	1010.0	1074.0	1094.0	1102.0
65°	76.0	92.0	170.0	244.0	706.0	834.0	882.0	920.0	972.0	992.0	996.0
67.5°	72.0	88.0	156.0	210.0	628.0	750.0	786.0	822.0	862.0	882.0	884.0
70°	66.0	84.0	144.0	186.0	548.0	654.0	684.0	722.0	754.0	764.0	770.0
72.5°	62.0	78.0	136.0	168.0	466.0	562.0	590.0	612.0	640.0	650.0	650.0
75°	56.0	70.0	128.0	150.0	382.0	460.0	484.0	506.0	528.0	532.0	526.0
77.5°	50.0	62.0	110.0	126.0	298.0	364.0	384.0	396.0	414.0	418.0	420.0
80°	42.0	54.0	86.0	98.0	216.0	268.0	282.0	292.0	308.0	308.0	312.0
82.5°	32.0	42.0	62.0	70.0	146.0	184.0	196.0	202.0	212.0	212.0	212.0
85°	20.0	26.0	40.0	46.0	88.0	112.0	120.0	122.0	130.0	132.0	132.0
87.5°	10.0	14.0	26.0	28.0	46.0	58.0	58.0	62.0	62.0	60.0	58.0
90°	10.4	18.7	26.9	29.0	45.6	67.7	78.7	69.9	52.4	39.3	39.3
92.5°	41.4	111.8	182.3	199.9	281.0	389.1	443.2	388.4	278.9	196.7	188.9
95°	99.4	228.3	357.2	389.4	691.4	1094.1	1295.4	1156.0	877.1	667.9	644.2
97.5°	171.9	285.6	399.3	427.7	931.3	1602.8	1938.5	1850.4	1674.1	1541.9	1496.8
100°	227.8	330.9	434.0	459.8	1018.6	1763.7	2136.3	2142.7	2155.6	2165.3	2111.6
102.5°	275.4	371.6	467.8	491.9	1058.7	1814.4	2192.2	2304.5	2529.1	2697.5	2651.5
105°	356.2	437.7	519.1	539.5	1088.3	1820.1	2186.0	2437.7	2941.2	3318.8	3294.1
107.5°	439.1	515.0	590.9	609.9	1093.8	1739.1	2061.7	2412.9	3115.2	3641.9	3647.9
110°	495.0	563.6	632.2	649.3	1085.6	1667.3	1958.2	2350.8	3135.9	3724.7	3750.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	549.9	615.2	680.6	696.9	1085.9	1604.6	1863.9	2265.7	3069.2	3671.9	3711.5
115°	632.7	693.0	753.2	768.3	1095.9	1532.7	1751.1	2138.1	2912.2	3492.8	3547.7
117.5°	714.5	769.3	824.0	837.7	1116.3	1487.7	1673.4	2022.7	2721.3	3245.3	3306.2
120°	762.1	813.7	865.2	878.1	1132.8	1472.5	1642.3	1961.5	2599.8	3078.6	3137.7
122.5°	808.7	860.7	912.7	925.7	1156.6	1464.5	1618.5	1905.9	2480.8	2911.9	2970.2
125°	880.2	927.6	975.0	986.8	1188.7	1458.0	1592.6	1836.8	2325.1	2691.3	2745.0
127.5°	938.2	986.1	1033.9	1045.9	1220.9	1454.2	1570.9	1780.5	2199.8	2514.2	2559.5
130°	969.2	1020.8	1072.3	1085.2	1244.3	1456.5	1562.6	1749.2	2122.5	2402.4	2444.3
132.5°	1001.3	1052.9	1104.4	1117.3	1263.3	1458.0	1555.3	1722.4	2056.5	2307.1	2344.6
135°	1049.0	1095.9	1142.9	1154.6	1284.0	1456.6	1542.9	1682.8	1962.6	2172.5	2204.8
137.5°	1097.6	1144.1	1190.6	1202.2	1315.1	1465.6	1540.8	1659.1	1895.7	2073.1	2099.6
140°	1138.0	1180.8	1223.6	1234.3	1334.1	1467.1	1533.6	1635.8	1840.1	1993.4	2018.1
142.5°	1169.1	1208.7	1248.2	1258.1	1349.9	1472.4	1533.6	1623.3	1802.8	1937.4	1958.7
145°	1216.7	1251.2	1285.8	1294.4	1370.7	1472.4	1523.2	1596.6	1743.5	1853.6	1869.7
147.5°	1264.4	1298.0	1331.6	1340.0	1401.1	1482.5	1523.2	1581.0	1696.5	1783.2	1796.5
150°	1295.4	1325.8	1356.2	1363.8	1416.9	1487.8	1523.2	1572.0	1669.6	1742.8	1753.6
152.5°	1327.5	1350.5	1373.5	1379.3	1427.3	1491.2	1523.2	1564.9	1648.2	1710.7	1718.9
155°	1375.2	1392.2	1409.2	1413.5	1450.1	1498.8	1523.2	1556.4	1622.7	1672.4	1677.8
157.5°	1410.4	1426.9	1443.5	1447.6	1472.8	1506.4	1523.2	1549.0	1600.5	1639.2	1643.0
160°	1434.2	1447.1	1460.0	1463.2	1483.2	1509.9	1523.2	1545.3	1589.5	1622.6	1624.8
162.5°	1458.0	1467.6	1477.3	1479.7	1494.2	1513.5	1523.2	1541.8	1579.1	1607.1	1609.2
165°	1483.9	1492.7	1501.4	1503.6	1510.1	1518.8	1523.2	1536.6	1563.3	1583.3	1585.5
167.5°	1507.7	1511.8	1516.0	1517.0	1522.5	1529.9	1533.6	1542.3	1559.8	1572.9	1573.8
170°	1523.2	1527.4	1531.6	1532.6	1532.9	1533.4	1533.6	1542.3	1559.8	1572.9	1572.9
172.5°	1531.5	1532.4	1533.4	1533.6	1533.6	1533.6	1533.6	1540.5	1554.3	1564.7	1563.9
175°	1542.9	1542.9	1542.9	1542.9	1539.8	1535.7	1533.6	1538.0	1546.7	1553.3	1553.3
177.5°	1542.9	1542.9	1542.9	1542.9	1540.5	1537.3	1535.7	1539.1	1546.0	1551.2	1550.3
180°	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	622.0	622.0
2.5°	664.0	660.0
5°	854.0	858.0
7.5°	1150.1	1148.1
10°	1430.1	1448.1
12.5°	1634.1	1638.1
15°	1758.1	1766.1
17.5°	1806.1	1808.1
20°	1808.1	1804.1
22.5°	1786.1	1782.1
25°	1760.1	1758.1
27.5°	1736.1	1738.1
30°	1726.1	1732.1
32.5°	1726.1	1736.1
35°	1730.1	1740.1
37.5°	1728.1	1740.1
40°	1720.1	1734.1
42.5°	1698.1	1708.1
45°	1664.1	1676.1
47.5°	1620.1	1628.1
50°	1564.1	1572.1
52.5°	1494.1	1496.1
55°	1410.1	1418.1
57.5°	1320.1	1322.1
60°	1220.1	1226.1
62.5°	1114.0	1114.0
65°	1002.0	1006.0
67.5°	886.0	896.0
70°	768.0	770.0
72.5°	652.0	652.0
75°	532.0	534.0
77.5°	418.0	418.0
80°	310.0	312.0
82.5°	214.0	218.0
85°	134.0	134.0
87.5°	62.0	56.0
90°	39.3	39.3
92.5°	157.6	126.3
95°	549.4	454.6
97.5°	1316.4	1136.0
100°	1896.6	1681.7
102.5°	2467.4	2283.3
105°	3195.1	3096.2
107.5°	3671.8	3695.7
110°	3853.6	3956.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3869.8	4028.1
115°	3767.2	3986.7
117.5°	3549.6	3793.1
120°	3374.3	3610.8
122.5°	3203.6	3436.9
125°	2960.0	3174.9
127.5°	2740.9	2922.2
130°	2611.8	2779.3
132.5°	2494.7	2644.7
135°	2334.2	2463.5
137.5°	2205.4	2311.3
140°	2117.1	2216.0
142.5°	2043.8	2129.0
145°	1934.1	1998.5
147.5°	1849.9	1903.3
150°	1796.9	1840.1
152.5°	1751.5	1784.2
155°	1699.4	1721.0
157.5°	1658.2	1673.4
160°	1633.5	1642.3
162.5°	1617.5	1625.8
165°	1594.2	1603.0
167.5°	1577.5	1581.2
170°	1572.9	1572.9
172.5°	1560.6	1557.4
175°	1553.3	1553.3
177.5°	1546.6	1542.9
180°	1542.9	1542.9



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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	2.83	3.57	3.91	4.66	6.16	16.00	16.75	17.09	17.84	19.34
	3H	3.52	4.19	4.62	5.29	6.81	17.83	18.50	18.93	19.60	21.12
	4H	3.81	4.45	4.92	5.55	7.07	18.47	19.11	19.58	20.21	21.73
	6H	4.06	4.64	5.18	5.75	7.28	18.90	19.48	20.01	20.59	22.12
	8H	4.12	4.68	5.24	5.80	7.33	19.02	19.57	20.14	20.69	22.22
	12H	4.14	4.67	5.26	5.78	7.33	19.08	19.61	20.20	20.72	22.27
4H	2H	10.03	10.66	11.14	11.76	13.28	16.26	16.90	17.38	18.00	19.52
	3H	11.58	12.11	12.70	13.24	14.78	18.30	18.83	19.42	19.96	21.49
	4H	11.67	12.16	12.80	13.28	14.83	19.06	19.55	20.19	20.67	22.22
	6H	11.68	12.10	12.81	13.24	14.78	19.59	20.01	20.72	21.15	22.70
	8H	11.65	12.04	12.78	13.17	14.74	19.75	20.14	20.88	21.27	22.84
	12H	11.60	11.96	12.75	13.10	14.67	19.84	20.19	20.99	21.34	22.91
8H	4H	13.11	13.50	14.24	14.63	16.19	19.11	19.50	20.24	20.63	22.20
	6H	13.34	13.67	14.50	14.84	16.40	19.73	20.06	20.89	21.23	22.79
	8H	13.36	13.64	14.52	14.80	16.38	19.95	20.24	21.11	21.39	22.97
	12H	13.32	13.57	14.49	14.72	16.34	20.09	20.34	21.26	21.49	23.10
12H	4H	13.24	13.60	14.39	14.74	16.31	19.06	19.41	20.21	20.56	22.12
	6H	13.60	13.88	14.76	15.04	16.62	19.72	20.00	20.88	21.15	22.73
	8H	13.66	13.91	14.83	15.06	16.68	19.94	20.19	21.10	21.34	22.95