

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: P937869

Luminaire Tested: SQ4-FB-125U-050D-935-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937869
REPORT IS A COMBINATION OF REPORTS P933589 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

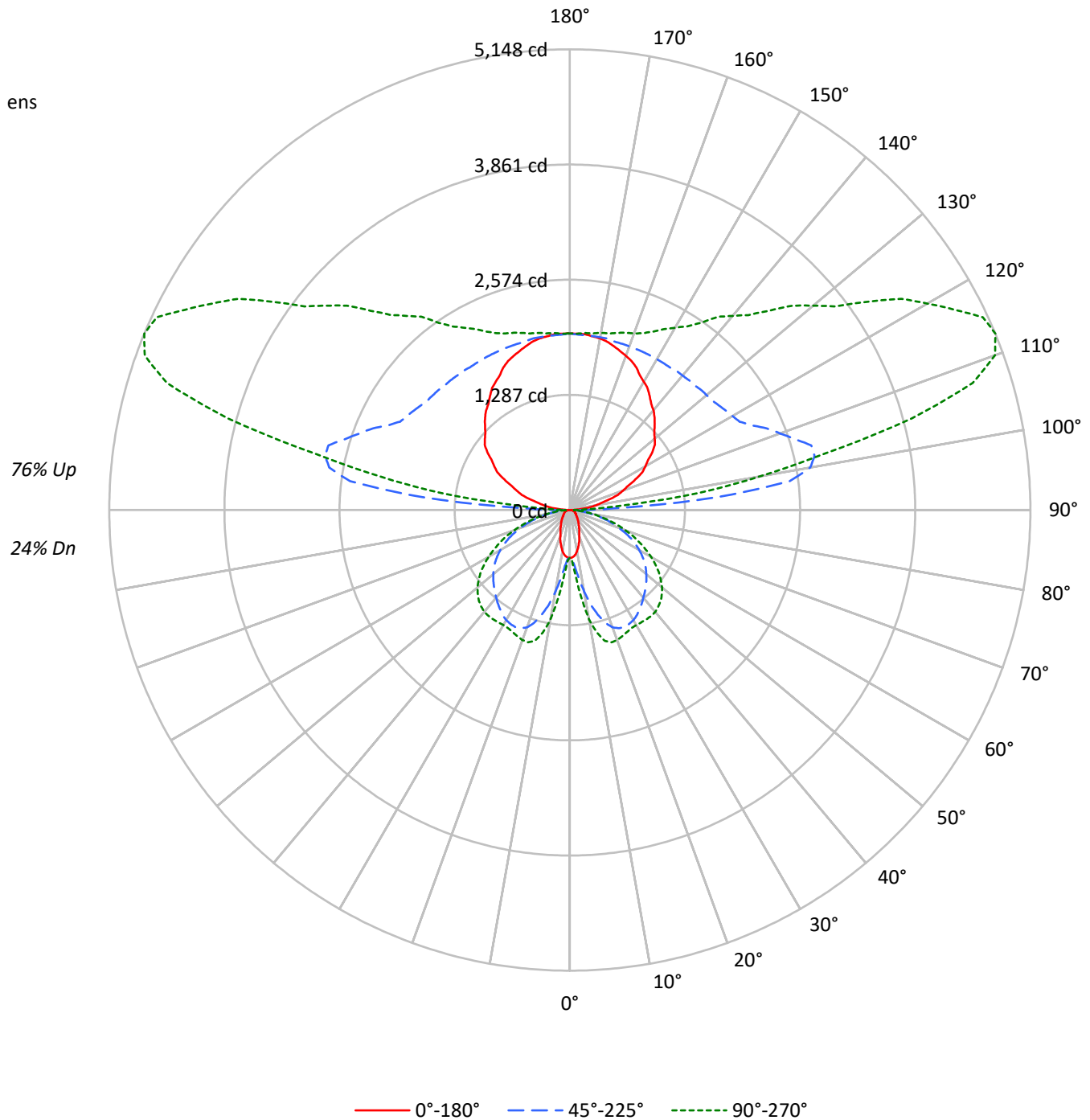
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16914.7 lumens
Efficiency: N/A
Efficacy: 118.5 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): 142.8
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				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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24				24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20				20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16				16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	22	20	19	13				13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11				11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10				10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8				8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7				7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6				6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6				6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5				5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1649	1649	1649
5°	1612	1906	2216
10°	1462	2780	3675
15°	1244	3633	4437
20°	1013	4211	4523
25°	845	4407	4430
30°	713	4436	4422
35°	631	4364	4536
40°	550	4269	4655
45°	498	4200	4673
50°	457	4139	4595
55°	439	4048	4392
60°	449	3872	4070
65°	469	3604	3628
70°	500	3145	3065
75°	556	2566	2392
80°	612	1782	1612
85°	554	947	824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 90°
 Luminance: 4899 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.0	0.4
10°-20°	305.7	1.8
20°-30°	534.7	3.2
30°-40°	688.3	4.1
40°-50°	768.8	4.5
50°-60°	736.3	4.4
60°-70°	583.5	3.4
70°-80°	343.1	2.0
80°-90°	102.8	0.6
90°-100°	961.2	5.7
100°-110°	2527.0	14.9
110°-120°	2620.2	15.5
120°-130°	2101.7	12.4
130°-140°	1649.1	9.7
140°-150°	1265.8	7.5
150°-160°	911.6	5.4
160°-170°	557.7	3.3
170°-180°	188.4	1.1
0°-30°	909.3	5.4
0°-40°	1597.5	9.4
0°-60°	3102.6	18.3
0°-90°	4132.0	24.4
90°-120°	6108.4	36.1
90°-150°	11125.0	65.8
90°-180°	12783.0	75.6
0°-180°	16914.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	533	533	533	533	533	
5°	520	557	627	710	735	48
15°	389	718	1210	1468	1514	108
25°	249	814	1442	1505	1507	115
35°	168	778	1358	1435	1492	105
45°	115	621	1200	1375	1437	89
55°	82	394	1018	1183	1216	75
65°	65	209	756	850	862	65
75°	48	129	415	456	458	50
85°	17	39	103	113	115	18
90°	13	37	100	50	50	12
95°	127	498	1656	854	581	141
105°	455	690	2794	4241	3957	483
115°	808	982	2238	4464	5095	799
125°	1125	1261	2035	3439	4058	999
135°	1341	1476	1972	2776	3148	1037
145°	1555	1654	1947	2369	2554	974
155°	1757	1806	1947	2137	2199	808
165°	1896	1922	1947	2023	2049	535
175°	1972	1972	1960	1985	1985	187
180°	1972	1972	1972	1972	1972	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	533.2	533.2	533.2	533.2	533.2	533.2	533.2	533.2	533.2	533.2	533.2
2.5°	533.2	533.2	536.6	538.3	541.7	543.4	546.9	550.3	560.6	562.3	565.7
5°	519.5	526.3	548.6	557.1	581.1	613.7	627.4	649.7	696.0	709.7	718.3
7.5°	498.8	514.3	569.1	582.9	642.9	728.6	764.6	812.6	886.3	922.3	951.4
10°	466.3	498.8	596.6	629.2	726.8	857.2	924.0	990.9	1102.3	1152.1	1170.9
12.5°	430.3	483.4	625.7	670.3	810.8	1001.2	1081.8	1155.5	1282.3	1349.2	1359.5
15°	389.2	461.2	653.1	718.3	900.1	1121.1	1210.4	1301.2	1419.5	1467.5	1479.5
17.5°	353.2	444.0	678.9	747.5	968.6	1229.2	1320.0	1395.5	1491.5	1524.1	1532.7
20°	308.6	416.6	696.0	785.2	1040.6	1308.1	1395.5	1453.8	1518.9	1539.5	1542.9
22.5°	276.0	387.4	706.3	798.9	1088.6	1356.0	1429.7	1476.1	1520.6	1527.5	1529.2
25°	248.6	354.9	704.6	814.3	1129.8	1385.2	1441.8	1476.1	1501.7	1505.2	1505.2
27.5°	222.9	318.9	697.7	817.7	1160.6	1392.1	1436.6	1460.6	1472.6	1479.5	1479.5
30°	200.6	284.6	680.6	810.8	1174.3	1385.2	1421.2	1433.2	1445.2	1455.5	1460.6
32.5°	183.4	252.0	654.8	797.1	1176.0	1368.1	1393.8	1400.6	1417.7	1441.8	1450.4
35°	168.0	219.5	625.7	778.3	1165.8	1340.6	1357.7	1364.6	1398.9	1434.9	1446.9
37.5°	152.6	195.4	588.1	745.8	1150.3	1308.1	1320.0	1332.0	1385.2	1428.0	1441.8
40°	137.2	174.8	543.4	709.7	1126.3	1268.6	1278.9	1297.8	1368.1	1417.7	1431.4
42.5°	125.2	157.7	495.4	672.1	1095.5	1224.1	1239.5	1266.9	1347.4	1400.6	1416.0
45°	114.8	140.6	444.0	620.6	1056.1	1177.7	1200.0	1237.8	1323.5	1374.9	1388.6
47.5°	104.5	128.6	390.9	567.4	1013.2	1131.5	1160.6	1203.4	1290.9	1340.6	1352.6
50°	96.0	116.6	337.7	510.9	966.8	1081.8	1116.0	1160.6	1249.8	1296.1	1311.5
52.5°	89.1	106.3	288.0	454.3	913.8	1030.3	1069.8	1116.0	1200.0	1244.6	1254.9
55°	82.3	97.7	245.1	394.3	858.9	975.5	1018.3	1062.9	1145.2	1182.9	1189.7
57.5°	78.9	90.8	209.2	337.7	800.6	913.8	961.7	1002.9	1080.0	1109.2	1116.0
60°	73.7	85.7	181.7	289.8	737.2	855.5	896.6	937.7	1002.9	1026.9	1032.0
62.5°	68.6	82.3	161.1	243.4	672.1	786.9	828.1	865.7	920.6	937.7	944.6
65°	65.2	78.9	145.7	209.2	605.2	714.9	756.1	788.6	833.2	850.3	853.7
67.5°	61.7	75.4	133.7	180.0	538.3	642.9	673.8	704.6	738.9	756.1	757.8
70°	56.6	72.0	123.5	159.4	469.7	560.6	586.3	618.9	646.3	654.8	660.0
72.5°	53.2	66.9	116.6	144.0	399.4	481.7	505.7	524.6	548.6	557.1	557.1
75°	48.0	60.0	109.7	128.6	327.4	394.3	414.8	433.8	452.6	456.0	450.9
77.5°	42.9	53.2	94.3	108.0	255.4	312.0	329.1	339.4	354.9	358.3	360.0
80°	36.0	46.3	73.7	84.0	185.1	229.7	241.7	250.3	264.0	264.0	267.4
82.5°	27.4	36.0	53.2	60.0	125.2	157.7	168.0	173.1	181.7	181.7	181.7
85°	17.1	22.3	34.3	39.4	75.4	96.0	102.8	104.5	111.4	113.1	113.1
87.5°	8.6	12.0	22.3	24.0	39.4	49.8	49.8	53.2	53.2	51.5	49.8
90°	13.2	23.8	34.4	37.1	58.2	86.4	100.5	89.4	67.1	50.3	50.3
92.5°	52.9	142.9	232.9	255.4	359.1	497.3	566.4	496.4	356.4	251.4	241.5
95°	127.0	291.7	456.4	497.6	883.5	1398.2	1655.5	1477.3	1120.9	853.6	823.3
97.5°	219.6	364.9	510.3	546.6	1190.2	2048.3	2477.4	2364.7	2139.5	1970.5	1912.8
100°	291.1	422.9	554.7	587.6	1301.8	2254.1	2730.1	2738.4	2754.9	2767.2	2698.5
102.5°	352.0	475.0	597.8	628.6	1353.0	2318.7	2801.6	2945.1	3232.1	3447.4	3388.7
105°	455.2	559.3	663.5	689.5	1390.9	2326.0	2793.6	3115.3	3758.9	4241.4	4209.8
107.5°	561.1	658.2	755.2	779.5	1398.0	2222.6	2634.9	3083.6	3981.1	4654.3	4662.0
110°	632.6	720.2	807.9	829.8	1387.3	2130.8	2502.5	3004.2	4007.6	4760.2	4793.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	702.7	786.2	869.7	890.6	1387.7	2050.7	2382.1	2895.6	3922.5	4692.7	4743.3
115°	808.5	885.6	962.7	981.9	1400.6	1958.7	2237.9	2732.5	3721.8	4463.8	4533.9
117.5°	913.2	983.1	1053.2	1070.6	1426.6	1901.2	2138.6	2585.1	3477.9	4147.5	4225.2
120°	974.0	1039.9	1105.8	1122.3	1447.8	1881.9	2098.9	2506.8	3322.6	3934.5	4010.0
122.5°	1033.6	1100.0	1166.5	1183.1	1478.2	1871.8	2068.5	2435.8	3170.4	3721.4	3795.9
125°	1124.9	1185.5	1246.0	1261.2	1519.3	1863.3	2035.3	2347.3	2971.4	3439.4	3508.1
127.5°	1199.0	1260.2	1321.4	1336.6	1560.3	1858.5	2007.6	2275.4	2811.3	3213.1	3271.1
130°	1238.7	1304.6	1370.4	1386.9	1590.3	1861.4	1997.0	2235.5	2712.5	3070.3	3123.8
132.5°	1279.7	1345.6	1411.5	1428.0	1614.5	1863.3	1987.7	2201.2	2628.2	2948.5	2996.5
135°	1340.6	1400.6	1460.6	1475.6	1641.0	1861.6	1971.9	2150.7	2508.3	2776.5	2817.8
137.5°	1402.8	1462.2	1521.6	1536.4	1680.7	1873.0	1969.2	2120.4	2422.7	2649.4	2683.2
140°	1454.4	1509.1	1563.8	1577.5	1704.9	1874.9	1959.9	2090.5	2351.6	2547.5	2579.1
142.5°	1494.1	1544.7	1595.3	1607.9	1725.2	1881.7	1959.9	2074.6	2304.1	2476.1	2503.3
145°	1555.0	1599.1	1643.3	1654.2	1751.7	1881.7	1946.7	2040.5	2228.2	2368.8	2389.4
147.5°	1615.8	1658.8	1701.7	1712.4	1790.6	1894.7	1946.7	2020.5	2168.2	2278.8	2295.9
150°	1655.5	1694.4	1733.2	1742.9	1810.8	1901.4	1946.7	2009.1	2133.7	2227.2	2241.0
152.5°	1696.6	1726.0	1755.5	1762.8	1824.1	1905.8	1946.7	2000.0	2106.4	2186.2	2196.7
155°	1757.4	1779.2	1801.0	1806.4	1853.2	1915.6	1946.7	1989.1	2073.8	2137.2	2144.1
157.5°	1802.5	1823.6	1844.8	1850.1	1882.3	1925.3	1946.7	1979.6	2045.5	2094.9	2099.8
160°	1832.9	1849.4	1865.9	1870.0	1895.5	1929.7	1946.7	1974.9	2031.4	2073.8	2076.6
162.5°	1863.3	1875.7	1888.0	1891.1	1909.7	1934.4	1946.7	1970.6	2018.2	2053.9	2056.6
165°	1896.4	1907.5	1918.7	1921.5	1930.0	1941.1	1946.7	1963.8	1997.9	2023.4	2026.2
167.5°	1926.9	1932.2	1937.4	1938.7	1945.8	1955.3	1959.9	1971.1	1993.4	2010.2	2011.4
170°	1946.7	1952.0	1957.3	1958.6	1959.0	1959.6	1959.9	1971.1	1993.4	2010.2	2010.2
172.5°	1957.3	1958.5	1959.7	1959.9	1959.9	1959.9	1959.9	1968.8	1986.4	1999.6	1998.6
175°	1971.9	1971.9	1971.9	1971.9	1967.9	1962.6	1959.9	1965.6	1976.7	1985.1	1985.1
177.5°	1971.9	1971.9	1971.9	1971.9	1968.8	1964.6	1962.6	1967.0	1975.8	1982.4	1981.2
180°	1971.9	1971.9	1971.9	1971.9	1971.9	1971.9	1971.9	1971.9	1971.9	1971.9	1971.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	533.2	533.2
2.5°	569.1	565.7
5°	732.0	735.4
7.5°	985.8	984.1
10°	1225.8	1241.2
12.5°	1400.6	1404.0
15°	1506.9	1513.7
17.5°	1548.1	1549.8
20°	1549.8	1546.4
22.5°	1530.9	1527.5
25°	1508.6	1506.9
27.5°	1488.0	1489.8
30°	1479.5	1484.6
32.5°	1479.5	1488.0
35°	1482.9	1491.5
37.5°	1481.2	1491.5
40°	1474.3	1486.3
42.5°	1455.5	1464.1
45°	1426.3	1436.6
47.5°	1388.6	1395.5
50°	1340.6	1347.4
52.5°	1280.6	1282.3
55°	1208.6	1215.5
57.5°	1131.5	1133.2
60°	1045.7	1050.9
62.5°	954.9	954.9
65°	858.9	862.3
67.5°	759.5	768.0
70°	658.3	660.0
72.5°	558.9	558.9
75°	456.0	457.7
77.5°	358.3	358.3
80°	265.7	267.4
82.5°	183.4	186.8
85°	114.8	114.8
87.5°	53.2	48.0
90°	50.3	50.3
92.5°	201.4	161.5
95°	702.1	581.0
97.5°	1682.3	1451.7
100°	2423.9	2149.2
102.5°	3153.3	2918.1
105°	4083.4	3956.9
107.5°	4692.6	4723.1
110°	4924.9	5056.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4945.6	5148.0
115°	4814.5	5095.0
117.5°	4536.4	4847.5
120°	4312.3	4614.6
122.5°	4094.1	4392.3
125°	3782.8	4057.5
127.5°	3502.8	3734.6
130°	3337.9	3552.0
132.5°	3188.2	3379.9
135°	2983.0	3148.3
137.5°	2818.5	2953.8
140°	2705.6	2832.0
142.5°	2612.1	2720.9
145°	2471.7	2554.1
147.5°	2364.1	2432.4
150°	2296.4	2351.7
152.5°	2238.5	2280.2
155°	2171.8	2199.4
157.5°	2119.2	2138.6
160°	2087.7	2098.9
162.5°	2067.1	2077.7
165°	2037.4	2048.6
167.5°	2016.1	2020.8
170°	2010.2	2010.2
172.5°	1994.4	1990.4
175°	1985.1	1985.1
177.5°	1976.6	1971.9
180°	1971.9	1971.9



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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	0.00	0.42	0.88	1.56	3.15	12.93	13.61	14.07	14.75	16.34
	3H	0.43	1.04	1.58	2.19	3.80	14.76	15.37	15.91	16.52	18.13
	4H	0.72	1.30	1.88	2.45	4.06	15.40	15.98	16.56	17.13	18.74
	6H	0.96	1.50	2.13	2.64	4.27	15.82	16.36	16.99	17.51	19.13
	8H	1.02	1.53	2.19	2.70	4.31	15.94	16.45	17.11	17.62	19.23
	12H	1.03	1.52	2.21	2.67	4.31	16.01	16.49	17.18	17.65	19.29
4H	2H	6.94	7.52	8.11	8.67	10.28	13.18	13.76	14.35	14.91	16.52
	3H	8.49	8.98	9.66	10.15	11.77	15.21	15.70	16.39	16.87	18.50
	4H	8.57	9.02	9.75	10.18	11.83	15.97	16.43	17.15	17.58	19.23
	6H	8.57	8.96	9.75	10.14	11.77	16.51	16.89	17.69	18.08	19.71
	8H	8.55	8.91	9.73	10.08	11.73	16.67	17.03	17.85	18.20	19.85
	12H	8.49	8.82	9.69	10.00	11.66	16.76	17.08	17.95	18.27	19.92
8H	4H	10.01	10.37	11.19	11.54	13.19	16.02	16.38	17.20	17.55	19.20
	6H	10.24	10.54	11.44	11.75	13.40	16.64	16.94	17.85	18.16	19.81
	8H	10.26	10.51	11.46	11.71	13.37	16.87	17.12	18.07	18.32	19.98
	12H	10.21	10.44	11.42	11.63	13.33	17.00	17.23	18.21	18.42	20.12
12H	4H	10.14	10.47	11.34	11.65	13.31	15.96	16.29	17.16	17.47	19.13
	6H	10.50	10.76	11.70	11.95	13.62	16.63	16.89	17.83	18.08	19.75
	8H	10.56	10.79	11.77	11.98	13.67	16.85	17.08	18.06	18.27	19.97