

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: P938515

Luminaire Tested: SQ4-FB-150U-125D-835-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938515
REPORT IS A COMBINATION OF REPORTS P933640 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

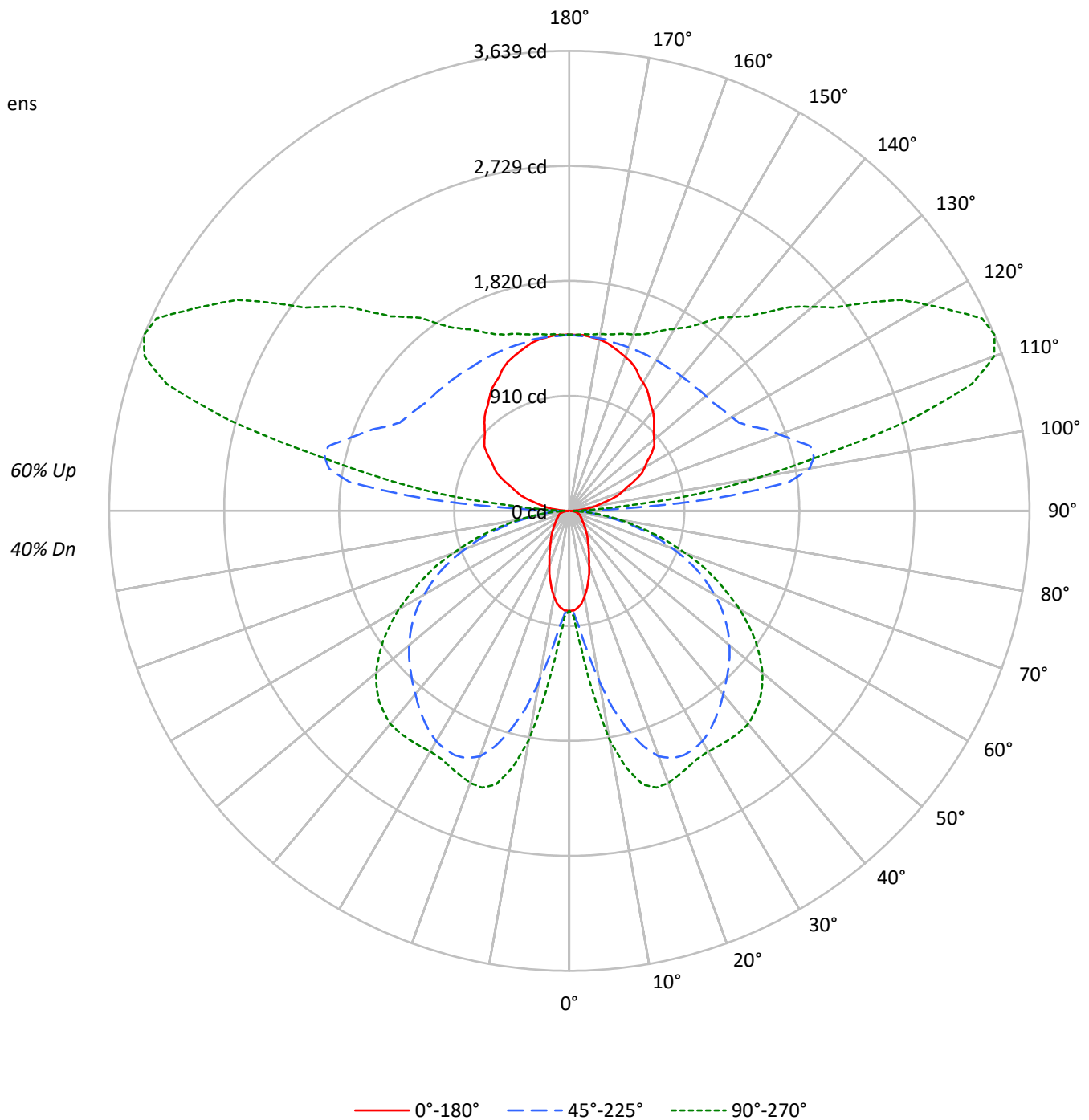
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15149.0 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 124.8
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	47	47	47	40
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39	39	39	39	33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32	32	32	32	27
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27	27	27	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23	23	23	23	19
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19	19	19	19	16
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17	17	17	17	14
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	15	15	15	12
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13	13	13	13	10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11	11	11	11	9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10	10	10	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4883	4883	4883
5°	4769	5643	6564
10°	4324	8224	10883
15°	3674	10742	13141
20°	2990	12444	13392
25°	2493	13020	13120
30°	2101	13098	13095
35°	1857	12877	13434
40°	1618	12591	13783
45°	1464	12380	13837
50°	1341	12190	13608
55°	1283	11913	13005
60°	1312	11385	12053
65°	1364	10584	10744
70°	1449	9224	9077
75°	1600	7514	7083
80°	1735	5205	4773
85°	1514	2756	2443

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13837 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.1	0.7
10°-20°	452.6	3.0
20°-30°	791.6	5.2
30°-40°	1019.1	6.7
40°-50°	1138.3	7.5
50°-60°	1090.2	7.2
60°-70°	864.0	5.7
70°-80°	508.0	3.4
80°-90°	146.5	1.0
90°-100°	679.5	4.5
100°-110°	1786.4	11.8
110°-120°	1852.3	12.2
120°-130°	1485.8	9.8
130°-140°	1165.8	7.7
140°-150°	894.8	5.9
150°-160°	644.4	4.3
160°-170°	394.3	2.6
170°-180°	133.2	0.9
0°-30°	1346.3	8.9
0°-40°	2365.4	15.6
0°-60°	4593.8	30.3
0°-90°	6112.3	40.3
90°-120°	4318.3	28.5
90°-150°	7864.8	51.9
90°-180°	9037.0	59.7
0°-180°	15149.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	789	789	789	789	789	
5°	769	825	929	1051	1089	71
15°	576	1064	1792	2173	2241	160
25°	368	1206	2135	2229	2231	170
35°	249	1152	2010	2125	2208	155
45°	170	919	1777	2036	2127	132
55°	122	584	1508	1752	1800	111
65°	96	310	1119	1259	1277	96
75°	71	190	614	675	678	74
85°	25	58	152	168	170	27
90°	9	26	71	36	36	9
95°	90	352	1170	603	411	100
105°	322	487	1975	2998	2797	341
115°	572	694	1582	3156	3602	565
125°	795	892	1439	2432	2868	706
135°	948	1043	1394	1963	2226	733
145°	1099	1170	1376	1675	1806	689
155°	1242	1277	1376	1511	1555	571
165°	1341	1358	1376	1430	1448	378
175°	1394	1394	1386	1403	1403	132
180°	1394	1394	1394	1394	1394	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	789.4	789.4	789.4	789.4	789.4	789.4	789.4	789.4	789.4	789.4	789.4
2.5°	789.4	789.4	794.5	797.0	802.1	804.7	809.7	814.8	830.0	832.6	837.7
5°	769.1	779.3	812.3	825.0	860.5	908.7	929.0	962.0	1030.6	1050.9	1063.6
7.5°	738.7	761.5	842.7	863.0	951.9	1078.8	1132.1	1203.2	1312.3	1365.6	1408.8
10°	690.4	738.7	883.3	931.6	1076.3	1269.2	1368.2	1467.2	1632.2	1705.8	1733.7
12.5°	637.1	715.8	926.5	992.5	1200.6	1482.4	1601.7	1710.8	1898.7	1997.7	2012.9
15°	576.2	682.8	967.1	1063.6	1332.6	1660.1	1792.1	1926.6	2101.8	2172.8	2190.6
17.5°	522.9	657.4	1005.2	1106.7	1434.2	1820.0	1954.5	2066.2	2208.4	2256.6	2269.3
20°	456.9	616.8	1030.6	1162.6	1540.8	1936.8	2066.2	2152.5	2249.0	2279.4	2284.5
22.5°	408.7	573.7	1045.8	1182.9	1611.9	2007.8	2117.0	2185.5	2251.5	2261.7	2264.2
25°	368.1	525.4	1043.3	1205.7	1672.8	2051.0	2134.8	2185.5	2223.6	2228.7	2228.7
27.5°	330.0	472.1	1033.1	1210.8	1718.5	2061.1	2127.1	2162.7	2180.4	2190.6	2190.6
30°	297.0	421.4	1007.7	1200.6	1738.8	2051.0	2104.3	2122.1	2139.8	2155.1	2162.7
32.5°	271.6	373.1	969.6	1180.3	1741.3	2025.6	2063.7	2073.8	2099.2	2134.8	2147.4
35°	248.8	324.9	926.5	1152.4	1726.1	1985.0	2010.4	2020.5	2071.3	2124.6	2142.4
37.5°	225.9	289.4	870.7	1104.2	1703.2	1936.8	1954.5	1972.3	2051.0	2114.4	2134.8
40°	203.1	258.9	804.7	1050.9	1667.7	1878.4	1893.6	1921.5	2025.6	2099.2	2119.5
42.5°	185.3	233.5	733.6	995.0	1622.0	1812.4	1835.2	1875.8	1995.1	2073.8	2096.7
45°	170.1	208.1	657.4	918.9	1563.6	1743.8	1776.8	1832.7	1959.6	2035.8	2056.1
47.5°	154.8	190.4	578.7	840.2	1500.2	1675.3	1718.5	1781.9	1911.4	1985.0	2002.8
50°	142.1	172.6	500.1	756.4	1431.6	1601.7	1652.5	1718.5	1850.5	1919.0	1941.8
52.5°	132.0	157.4	426.4	672.7	1352.9	1525.5	1583.9	1652.5	1776.8	1842.8	1858.1
55°	121.8	144.7	363.0	583.8	1271.7	1444.3	1507.8	1573.8	1695.6	1751.5	1761.6
57.5°	116.8	134.5	309.7	500.1	1185.4	1352.9	1424.0	1484.9	1599.2	1642.3	1652.5
60°	109.1	126.9	269.1	429.0	1091.5	1266.6	1327.6	1388.5	1484.9	1520.5	1528.1
62.5°	101.5	121.8	238.6	360.4	995.0	1165.1	1226.0	1281.9	1363.1	1388.5	1398.6
65°	96.5	116.8	215.8	309.7	896.0	1058.5	1119.4	1167.6	1233.6	1259.0	1264.1
67.5°	91.4	111.7	198.0	266.5	797.0	951.9	997.6	1043.3	1094.0	1119.4	1122.0
70°	83.8	106.6	182.8	236.1	695.5	830.0	868.1	916.3	957.0	969.6	977.3
72.5°	78.7	99.0	172.6	213.2	591.4	713.3	748.8	776.7	812.3	825.0	825.0
75°	71.1	88.8	162.5	190.4	484.8	583.8	614.3	642.2	670.1	675.2	667.6
77.5°	63.5	78.7	139.6	159.9	378.2	462.0	487.4	502.6	525.4	530.5	533.1
80°	53.3	68.5	109.1	124.4	274.1	340.1	357.9	370.6	390.9	390.9	396.0
82.5°	40.6	53.3	78.7	88.8	185.3	233.5	248.8	256.4	269.1	269.1	269.1
85°	25.4	33.0	50.8	58.4	111.7	142.1	152.3	154.8	165.0	167.5	167.5
87.5°	12.7	17.8	33.0	35.5	58.4	73.6	73.6	78.7	78.7	76.2	73.6
90°	9.4	16.9	24.3	26.2	41.2	61.1	71.1	63.2	47.4	35.6	35.6
92.5°	37.4	101.0	164.7	180.6	253.9	351.6	400.4	350.9	252.0	177.8	170.7
95°	89.8	206.2	322.7	351.8	624.7	988.5	1170.4	1044.4	792.4	603.4	582.0
97.5°	155.3	258.0	360.7	386.4	841.4	1448.1	1751.4	1671.8	1512.5	1393.1	1352.3
100°	205.8	299.0	392.1	415.4	920.3	1593.5	1930.1	1935.9	1947.6	1956.3	1907.8
102.5°	248.9	335.8	422.7	444.4	956.5	1639.2	1980.6	2082.0	2284.9	2437.1	2395.5
105°	321.8	395.4	469.0	487.4	983.3	1644.4	1975.0	2202.4	2657.3	2998.5	2976.1
107.5°	396.7	465.3	533.9	551.0	988.2	1571.2	1862.7	2180.0	2814.5	3290.4	3295.8
110°	447.2	509.2	571.1	586.6	980.8	1506.3	1769.1	2123.8	2833.2	3365.2	3388.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	496.8	555.8	614.8	629.6	981.1	1449.7	1684.0	2047.0	2773.0	3317.5	3353.3
115°	571.6	626.1	680.6	694.2	990.1	1384.7	1582.0	1931.7	2631.1	3155.6	3205.2
117.5°	645.5	695.0	744.5	756.9	1008.6	1344.1	1511.9	1827.5	2458.6	2932.0	2987.0
120°	688.6	735.2	781.8	793.4	1023.5	1330.4	1483.8	1772.2	2348.9	2781.4	2834.8
122.5°	730.7	777.7	824.7	836.4	1045.0	1323.2	1462.3	1722.0	2241.3	2630.8	2683.5
125°	795.2	838.0	880.9	891.6	1074.0	1317.3	1438.9	1659.5	2100.6	2431.5	2480.0
127.5°	847.6	890.8	934.1	944.9	1103.0	1313.8	1419.2	1608.6	1987.4	2271.5	2312.5
130°	875.7	922.3	968.9	980.5	1124.3	1316.0	1411.8	1580.4	1917.6	2170.5	2208.3
132.5°	904.7	951.3	997.9	1009.5	1141.4	1317.3	1405.2	1556.1	1858.0	2084.4	2118.3
135°	947.7	990.1	1032.6	1043.2	1160.1	1316.0	1394.0	1520.4	1773.2	1962.8	1992.0
137.5°	991.7	1033.7	1075.7	1086.2	1188.2	1324.1	1392.1	1499.0	1712.7	1873.0	1896.9
140°	1028.2	1066.9	1105.5	1115.2	1205.3	1325.5	1385.6	1477.9	1662.5	1801.0	1823.3
142.5°	1056.2	1092.0	1127.8	1136.7	1219.7	1330.3	1385.6	1466.7	1628.8	1750.4	1769.6
145°	1099.3	1130.5	1161.7	1169.5	1238.4	1330.3	1376.2	1442.5	1575.2	1674.7	1689.2
147.5°	1142.3	1172.7	1203.0	1210.6	1265.8	1339.4	1376.2	1428.4	1532.7	1611.0	1623.1
150°	1170.4	1197.8	1225.2	1232.1	1280.1	1344.2	1376.2	1420.3	1508.4	1574.5	1584.3
152.5°	1199.4	1220.2	1241.0	1246.2	1289.5	1347.3	1376.2	1413.8	1489.1	1545.5	1552.9
155°	1242.4	1257.8	1273.2	1277.0	1310.1	1354.2	1376.2	1406.1	1466.0	1510.9	1515.8
157.5°	1274.2	1289.2	1304.2	1307.9	1330.7	1361.0	1376.2	1399.5	1446.1	1481.0	1484.4
160°	1295.8	1307.4	1319.0	1321.9	1340.0	1364.1	1376.2	1396.2	1436.1	1466.0	1468.0
162.5°	1317.3	1326.0	1334.7	1336.9	1350.0	1367.5	1376.2	1393.0	1426.7	1452.0	1453.9
165°	1340.7	1348.6	1356.4	1358.4	1364.3	1372.2	1376.2	1388.3	1412.4	1430.5	1432.5
167.5°	1362.2	1365.9	1369.7	1370.6	1375.6	1382.3	1385.6	1393.5	1409.3	1421.1	1421.9
170°	1376.2	1379.9	1383.7	1384.6	1384.9	1385.4	1385.6	1393.5	1409.3	1421.1	1421.1
172.5°	1383.7	1384.5	1385.4	1385.6	1385.6	1385.6	1385.6	1391.8	1404.3	1413.6	1412.9
175°	1394.0	1394.0	1394.0	1394.0	1391.2	1387.5	1385.6	1389.5	1397.4	1403.3	1403.3
177.5°	1394.0	1394.0	1394.0	1394.0	1391.8	1388.9	1387.4	1390.5	1396.8	1401.5	1400.7
180°	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	789.4	789.4
2.5°	842.7	837.7
5°	1083.9	1089.0
7.5°	1459.6	1457.0
10°	1814.9	1837.8
12.5°	2073.8	2078.9
15°	2231.2	2241.4
17.5°	2292.1	2294.7
20°	2294.7	2289.6
22.5°	2266.7	2261.7
25°	2233.7	2231.2
27.5°	2203.3	2205.8
30°	2190.6	2198.2
32.5°	2190.6	2203.3
35°	2195.7	2208.4
37.5°	2193.1	2208.4
40°	2183.0	2200.7
42.5°	2155.1	2167.8
45°	2111.9	2127.1
47.5°	2056.1	2066.2
50°	1985.0	1995.1
52.5°	1896.1	1898.7
55°	1789.5	1799.7
57.5°	1675.3	1677.8
60°	1548.4	1556.0
62.5°	1413.9	1413.9
65°	1271.7	1276.8
67.5°	1124.5	1137.2
70°	974.7	977.3
72.5°	827.5	827.5
75°	675.2	677.7
77.5°	530.5	530.5
80°	393.4	396.0
82.5°	271.6	276.7
85°	170.1	170.1
87.5°	78.7	71.1
90°	35.6	35.6
92.5°	142.4	114.1
95°	496.3	410.7
97.5°	1189.3	1026.3
100°	1713.6	1519.4
102.5°	2229.2	2062.9
105°	2886.7	2797.3
107.5°	3317.4	3339.0
110°	3481.6	3574.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3496.3	3639.3
115°	3403.5	3601.9
117.5°	3207.0	3427.0
120°	3048.6	3262.3
122.5°	2894.3	3105.1
125°	2674.2	2868.4
127.5°	2476.3	2640.2
130°	2359.7	2511.0
132.5°	2253.8	2389.4
135°	2108.9	2225.7
137.5°	1992.6	2088.2
140°	1912.7	2002.1
142.5°	1846.6	1923.5
145°	1747.4	1805.6
147.5°	1671.3	1719.6
150°	1623.4	1662.5
152.5°	1582.4	1612.0
155°	1535.3	1554.9
157.5°	1498.2	1511.9
160°	1475.9	1483.8
162.5°	1461.3	1468.8
165°	1440.3	1448.2
167.5°	1425.3	1428.6
170°	1421.1	1421.1
172.5°	1410.0	1407.1
175°	1403.3	1403.3
177.5°	1397.3	1394.0
180°	1394.0	1394.0



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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	5.56	6.37	6.59	7.41	8.81	18.72	19.53	19.75	20.57	21.97
	3H	6.26	6.99	7.30	8.04	9.46	20.55	21.28	21.59	22.33	23.75
	4H	6.56	7.25	7.61	8.30	9.72	21.19	21.88	22.24	22.94	24.36
	6H	6.80	7.44	7.87	8.50	9.94	21.62	22.25	22.68	23.31	24.75
	8H	6.87	7.48	7.94	8.55	9.98	21.73	22.34	22.80	23.41	24.85
	12H	6.89	7.46	7.96	8.53	9.99	21.80	22.37	22.87	23.44	24.90
4H	2H	12.76	13.45	13.82	14.50	15.93	18.99	19.68	20.05	20.73	22.16
	3H	14.32	14.90	15.39	15.98	17.42	21.03	21.61	22.09	22.68	24.12
	4H	14.42	14.95	15.49	16.02	17.48	21.79	22.32	22.86	23.39	24.85
	6H	14.42	14.88	15.50	15.97	17.43	22.32	22.78	23.40	23.87	25.33
	8H	14.40	14.82	15.48	15.91	17.38	22.48	22.91	23.56	23.99	25.46
	12H	14.35	14.74	15.45	15.84	17.31	22.57	22.95	23.67	24.05	25.53
8H	4H	15.85	16.28	16.93	17.36	18.84	21.85	22.27	22.93	23.36	24.83
	6H	16.09	16.45	17.20	17.57	19.04	22.47	22.82	23.57	23.95	25.42
	8H	16.11	16.42	17.22	17.53	19.02	22.68	22.99	23.80	24.10	25.59
	12H	16.08	16.35	17.19	17.45	18.98	22.82	23.10	23.94	24.20	25.73
12H	4H	15.99	16.38	17.09	17.48	18.95	21.80	22.18	22.90	23.28	24.76
	6H	16.35	16.66	17.46	17.77	19.26	22.45	22.76	23.56	23.87	25.36
	8H	16.42	16.69	17.53	17.79	19.32	22.68	22.95	23.79	24.05	25.58