

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: P938537

Luminaire Tested: SQ4-FB-150U-125D-92765-1D-UNV-STD-W-6-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938537
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-92765-1D-UNV-STD-W-6-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

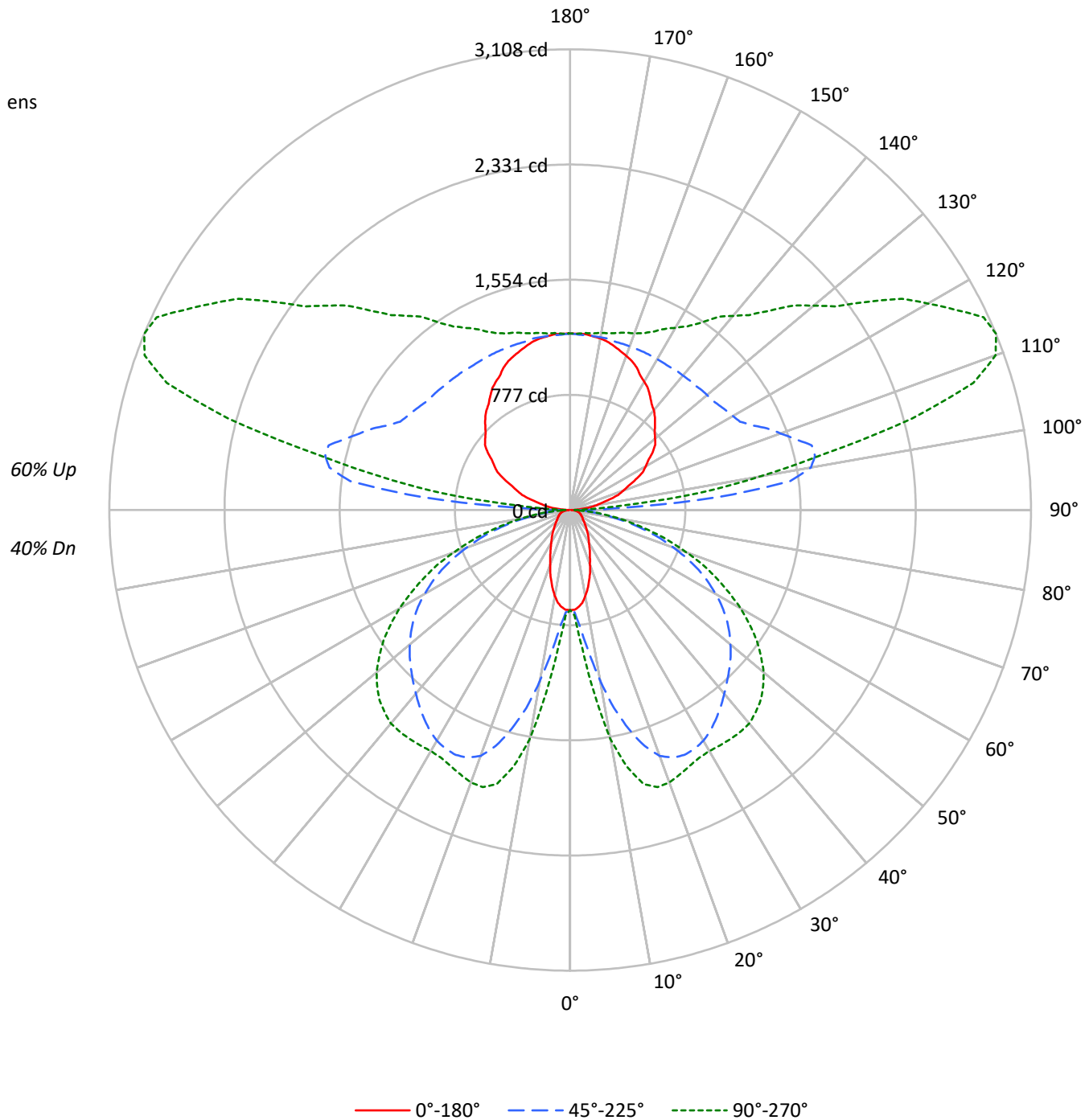
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12939.2 lumens
Efficiency: N/A
Efficacy: 103.7 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 (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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CATALOG NUMBER: SQ4-FB-150U-125D-92765-1D-UNV-STD-W-6-2700K

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	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°	4171	4171	4171
5°	4073	4820	5607
10°	3693	7024	9295
15°	3138	9175	11224
20°	2554	10629	11438
25°	2129	11120	11206
30°	1795	11187	11185
35°	1586	10999	11475
40°	1382	10755	11773
45°	1250	10574	11819
50°	1146	10412	11624
55°	1096	10176	11109
60°	1121	9724	10294
65°	1165	9040	9177
70°	1238	7879	7753
75°	1366	6418	6049
80°	1481	4446	4076
85°	1294	2355	2087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11819 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.2	0.7
10°-20°	386.6	3.0
20°-30°	676.2	5.2
30°-40°	870.4	6.7
40°-50°	972.2	7.5
50°-60°	931.2	7.2
60°-70°	737.9	5.7
70°-80°	433.9	3.4
80°-90°	125.1	1.0
90°-100°	580.4	4.5
100°-110°	1525.8	11.8
110°-120°	1582.1	12.2
120°-130°	1269.1	9.8
130°-140°	995.8	7.7
140°-150°	764.3	5.9
150°-160°	550.4	4.3
160°-170°	336.8	2.6
170°-180°	113.8	0.9
0°-30°	1149.9	8.9
0°-40°	2020.4	15.6
0°-60°	3923.7	30.3
0°-90°	5220.7	40.3
90°-120°	3688.4	28.5
90°-150°	6717.5	51.9
90°-180°	7719.0	59.7
0°-180°	12939.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	674	674	674	674	674	
5°	657	705	794	898	930	61
15°	492	908	1531	1856	1914	137
25°	314	1030	1823	1904	1906	145
35°	212	984	1717	1815	1886	133
45°	145	785	1518	1739	1817	112
55°	104	499	1288	1496	1537	95
65°	82	264	956	1075	1091	82
75°	61	163	525	577	579	64
85°	22	50	130	143	145	23
90°	8	22	61	30	30	8
95°	77	300	1000	515	351	85
105°	275	416	1687	2561	2389	291
115°	488	593	1351	2695	3076	482
125°	679	762	1229	2077	2450	603
135°	810	891	1191	1676	1901	626
145°	939	999	1176	1430	1542	588
155°	1061	1091	1176	1290	1328	488
165°	1145	1160	1176	1222	1237	323
175°	1191	1191	1184	1199	1199	113
180°	1191	1191	1191	1191	1191	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	674.2	674.2	674.2	674.2	674.2	674.2	674.2	674.2	674.2	674.2	674.2
2.5°	674.2	674.2	678.6	680.7	685.1	687.3	691.6	695.9	708.9	711.1	715.5
5°	656.9	665.6	693.8	704.7	735.0	776.1	793.5	821.7	880.3	897.6	908.5
7.5°	630.9	650.4	719.8	737.1	813.0	921.4	967.0	1027.7	1120.9	1166.4	1203.3
10°	589.7	630.9	754.5	795.7	919.3	1084.1	1168.6	1253.2	1394.1	1457.0	1480.8
12.5°	544.2	611.4	791.3	847.7	1025.5	1266.2	1368.1	1461.2	1621.7	1706.3	1719.3
15°	492.1	583.2	826.0	908.5	1138.2	1417.9	1530.7	1645.6	1795.2	1855.8	1871.1
17.5°	446.6	561.5	858.6	945.3	1225.0	1554.5	1669.4	1764.8	1886.3	1927.4	1938.3
20°	390.3	526.8	880.3	993.0	1316.0	1654.3	1764.8	1838.5	1920.9	1946.9	1951.3
22.5°	349.1	490.0	893.2	1010.3	1376.8	1714.9	1808.2	1866.7	1923.1	1931.8	1933.9
25°	314.4	448.8	891.1	1029.8	1428.8	1751.8	1823.4	1866.7	1899.2	1903.6	1903.6
27.5°	281.9	403.2	882.4	1034.2	1467.8	1760.4	1816.8	1847.2	1862.3	1871.1	1871.1
30°	253.7	359.9	860.7	1025.5	1485.2	1751.8	1797.3	1812.5	1827.7	1840.7	1847.2
32.5°	232.0	318.7	828.2	1008.1	1487.3	1730.1	1762.7	1771.3	1793.0	1823.4	1834.2
35°	212.5	277.5	791.3	984.3	1474.3	1695.4	1717.1	1725.8	1769.2	1814.7	1829.9
37.5°	192.9	247.2	743.7	943.1	1454.8	1654.3	1669.4	1684.6	1751.8	1806.0	1823.4
40°	173.5	221.1	687.3	897.6	1424.4	1604.4	1617.4	1641.2	1730.1	1793.0	1810.3
42.5°	158.3	199.4	626.6	849.9	1385.4	1548.0	1567.5	1602.2	1704.1	1771.3	1790.9
45°	145.3	177.7	561.5	784.9	1335.5	1489.4	1517.6	1565.4	1673.7	1738.8	1756.2
47.5°	132.2	162.6	494.3	717.6	1281.4	1430.9	1467.8	1522.0	1632.6	1695.4	1710.6
50°	121.4	147.4	427.1	646.1	1222.8	1368.1	1411.4	1467.8	1580.6	1639.1	1658.5
52.5°	112.7	134.4	364.2	574.6	1155.5	1303.0	1352.9	1411.4	1517.6	1574.0	1587.1
55°	104.0	123.6	310.0	498.6	1086.2	1233.6	1287.9	1344.2	1448.3	1496.0	1504.6
57.5°	99.8	114.9	264.5	427.1	1012.5	1155.5	1216.3	1268.3	1365.9	1402.7	1411.4
60°	93.2	108.4	229.8	366.4	932.3	1081.8	1133.9	1186.0	1268.3	1298.7	1305.2
62.5°	86.7	104.0	203.8	307.8	849.9	995.1	1047.2	1094.9	1164.3	1186.0	1194.6
65°	82.4	99.8	184.3	264.5	765.3	904.1	956.1	997.3	1053.7	1075.3	1079.7
67.5°	78.1	95.4	169.1	227.6	680.7	813.0	852.1	891.1	934.4	956.1	958.3
70°	71.6	91.1	156.1	201.7	594.0	708.9	741.5	782.6	817.4	828.2	834.7
72.5°	67.2	84.6	147.4	182.1	505.1	609.2	639.6	663.4	693.8	704.7	704.7
75°	60.7	75.8	138.8	162.6	414.1	498.6	524.7	548.5	572.4	576.7	570.2
77.5°	54.2	67.2	119.2	136.6	323.0	394.6	416.3	429.3	448.8	453.1	455.3
80°	45.5	58.5	93.2	106.3	234.1	290.5	305.7	316.5	333.9	333.9	338.2
82.5°	34.7	45.5	67.2	75.8	158.3	199.4	212.5	219.0	229.8	229.8	229.8
85°	21.7	28.2	43.4	49.9	95.4	121.4	130.1	132.2	140.9	143.1	143.1
87.5°	10.8	15.2	28.2	30.3	49.9	62.9	62.9	67.2	67.2	65.1	62.9
90°	8.0	14.4	20.8	22.4	35.2	52.2	60.7	54.0	40.5	30.4	30.4
92.5°	31.9	86.3	140.7	154.3	216.9	300.3	342.0	299.7	215.2	151.9	145.8
95°	76.7	176.1	275.6	300.5	533.6	844.3	999.7	892.1	676.8	515.4	497.1
97.5°	132.6	220.4	308.1	330.0	718.7	1236.9	1495.9	1427.9	1291.9	1189.9	1155.0
100°	175.8	255.4	334.9	354.8	786.1	1361.1	1648.6	1653.5	1663.5	1670.9	1629.5
102.5°	212.6	286.8	361.0	379.6	817.0	1400.1	1691.7	1778.3	1951.6	2081.6	2046.1
105°	274.9	337.7	400.6	416.3	839.9	1404.5	1686.9	1881.1	2269.7	2561.1	2542.0
107.5°	338.8	397.4	456.0	470.6	844.0	1342.0	1591.0	1862.0	2403.9	2810.4	2815.0
110°	382.0	434.9	487.8	501.0	837.7	1286.6	1511.0	1814.0	2419.9	2874.3	2894.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	424.3	474.7	525.1	537.8	838.0	1238.2	1438.4	1748.4	2368.5	2833.6	2864.1
115°	488.2	534.8	581.3	592.9	845.7	1182.7	1351.2	1649.9	2247.3	2695.3	2737.7
117.5°	551.3	593.6	635.9	646.5	861.5	1148.0	1291.4	1560.9	2100.0	2504.3	2551.3
120°	588.2	628.0	667.8	677.7	874.2	1136.3	1267.4	1513.7	2006.3	2375.7	2421.3
122.5°	624.1	664.3	704.4	714.4	892.6	1130.2	1249.0	1470.8	1914.4	2247.0	2292.1
125°	679.2	715.8	752.4	761.5	917.3	1125.1	1229.0	1417.4	1794.2	2076.8	2118.2
127.5°	724.0	760.9	797.8	807.1	942.1	1122.2	1212.2	1374.0	1697.5	1940.2	1975.2
130°	748.0	787.8	827.6	837.5	960.3	1124.0	1205.9	1349.9	1637.9	1853.9	1886.2
132.5°	772.7	812.5	852.3	862.2	974.9	1125.1	1200.2	1329.1	1587.0	1780.3	1809.3
135°	809.5	845.7	882.0	891.0	990.9	1124.0	1190.7	1298.6	1514.5	1676.5	1701.4
137.5°	847.0	882.9	918.8	927.8	1014.9	1131.0	1189.0	1280.3	1462.9	1599.8	1620.2
140°	878.2	911.3	944.2	952.5	1029.5	1132.1	1183.5	1262.3	1420.0	1538.3	1557.3
142.5°	902.1	932.7	963.3	970.9	1041.8	1136.2	1183.5	1252.7	1391.2	1495.1	1511.5
145°	938.9	965.6	992.2	998.9	1057.8	1136.2	1175.5	1232.1	1345.4	1430.4	1442.8
147.5°	975.7	1001.6	1027.5	1034.0	1081.2	1144.0	1175.5	1220.0	1309.1	1376.0	1386.3
150°	999.7	1023.1	1046.5	1052.4	1093.4	1148.1	1175.5	1213.1	1288.4	1344.8	1353.2
152.5°	1024.4	1042.2	1060.0	1064.4	1101.4	1150.8	1175.5	1207.6	1271.9	1320.1	1326.4
155°	1061.2	1074.3	1087.5	1090.7	1119.0	1156.7	1175.5	1201.0	1252.2	1290.5	1294.7
157.5°	1088.3	1101.1	1114.0	1117.1	1136.6	1162.5	1175.5	1195.4	1235.2	1265.0	1267.9
160°	1106.8	1116.7	1126.6	1129.1	1144.5	1165.1	1175.5	1192.5	1226.6	1252.2	1253.9
162.5°	1125.1	1132.6	1140.0	1141.9	1153.1	1168.0	1175.5	1189.8	1218.6	1240.2	1241.8
165°	1145.1	1151.9	1158.5	1160.2	1165.3	1172.0	1175.5	1185.8	1206.4	1221.8	1223.5
167.5°	1163.5	1166.7	1169.9	1170.7	1174.9	1180.7	1183.5	1190.2	1203.7	1213.8	1214.5
170°	1175.5	1178.6	1181.9	1182.6	1182.9	1183.3	1183.5	1190.2	1203.7	1213.8	1213.8
172.5°	1181.9	1182.5	1183.3	1183.5	1183.5	1183.5	1183.5	1188.8	1199.5	1207.4	1206.8
175°	1190.7	1190.7	1190.7	1190.7	1188.3	1185.1	1183.5	1186.8	1193.6	1198.6	1198.6
177.5°	1190.7	1190.7	1190.7	1190.7	1188.8	1186.3	1185.0	1187.7	1193.0	1197.1	1196.4
180°	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	674.2	674.2
2.5°	719.8	715.5
5°	925.8	930.1
7.5°	1246.7	1244.5
10°	1550.2	1569.7
12.5°	1771.3	1775.6
15°	1905.7	1914.4
17.5°	1957.7	1960.0
20°	1960.0	1955.6
22.5°	1936.1	1931.8
25°	1907.9	1905.7
27.5°	1881.9	1884.0
30°	1871.1	1877.5
32.5°	1871.1	1881.9
35°	1875.4	1886.3
37.5°	1873.2	1886.3
40°	1864.6	1879.7
42.5°	1840.7	1851.6
45°	1803.8	1816.8
47.5°	1756.2	1764.8
50°	1695.4	1704.1
52.5°	1619.5	1621.7
55°	1528.5	1537.2
57.5°	1430.9	1433.1
60°	1322.5	1329.0
62.5°	1207.7	1207.7
65°	1086.2	1090.6
67.5°	960.5	971.3
70°	832.5	834.7
72.5°	706.8	706.8
75°	576.7	578.8
77.5°	453.1	453.1
80°	336.0	338.2
82.5°	232.0	236.3
85°	145.3	145.3
87.5°	67.2	60.7
90°	30.4	30.4
92.5°	121.6	97.5
95°	423.9	350.8
97.5°	1015.8	876.6
100°	1463.6	1297.8
102.5°	1904.0	1762.0
105°	2465.6	2389.3
107.5°	2833.5	2851.9
110°	2973.7	3053.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2986.3	3108.4
115°	2907.0	3076.5
117.5°	2739.2	2927.1
120°	2603.9	2786.4
122.5°	2472.1	2652.2
125°	2284.1	2450.0
127.5°	2115.1	2255.1
130°	2015.5	2144.7
132.5°	1925.0	2040.9
135°	1801.3	1901.0
137.5°	1701.9	1783.6
140°	1633.7	1710.0
142.5°	1577.2	1642.9
145°	1492.5	1542.2
147.5°	1427.5	1468.8
150°	1386.6	1420.0
152.5°	1351.6	1376.9
155°	1311.3	1328.1
157.5°	1279.7	1291.4
160°	1260.6	1267.4
162.5°	1248.1	1254.5
165°	1230.2	1236.9
167.5°	1217.4	1220.2
170°	1213.8	1213.8
172.5°	1204.3	1201.8
175°	1198.6	1198.6
177.5°	1193.5	1190.7
180°	1190.7	1190.7



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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	5.01	5.82	6.04	6.86	8.26	18.18	18.99	19.20	20.03	21.43
	3H	5.71	6.44	6.75	7.49	8.91	20.01	20.73	21.04	21.78	23.20
	4H	6.01	6.70	7.06	7.75	9.18	20.65	21.34	21.70	22.39	23.81
	6H	6.26	6.89	7.32	7.95	9.39	21.07	21.71	22.13	22.76	24.20
	8H	6.32	6.93	7.39	8.00	9.43	21.19	21.79	22.25	22.86	24.30
	12H	6.34	6.91	7.41	7.98	9.44	21.25	21.83	22.32	22.89	24.35
4H	2H	12.21	12.90	13.27	13.95	15.38	18.44	19.13	19.50	20.19	21.61
	3H	13.77	14.35	14.84	15.43	16.87	20.48	21.06	21.55	22.14	23.58
	4H	13.87	14.40	14.94	15.47	16.93	21.24	21.77	22.31	22.84	24.30
	6H	13.88	14.33	14.96	15.43	16.88	21.77	22.23	22.85	23.32	24.78
	8H	13.85	14.28	14.93	15.36	16.83	21.93	22.36	23.01	23.44	24.92
	12H	13.80	14.19	14.90	15.29	16.77	22.02	22.41	23.12	23.51	24.98
8H	4H	15.30	15.73	16.39	16.82	18.29	21.30	21.72	22.38	22.81	24.28
	6H	15.54	15.90	16.65	17.02	18.49	21.92	22.27	23.02	23.40	24.87
	8H	15.56	15.87	16.67	16.98	18.47	22.14	22.45	23.25	23.56	25.04
	12H	15.53	15.80	16.64	16.91	18.43	22.28	22.55	23.39	23.65	25.18
12H	4H	15.44	15.83	16.54	16.93	18.41	21.25	21.63	22.35	22.73	24.21
	6H	15.80	16.11	16.91	17.22	18.71	21.90	22.21	23.01	23.32	24.81
	8H	15.87	16.14	16.98	17.25	18.77	22.13	22.40	23.24	23.51	25.03