

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: P937269

Luminaire Tested: SQ4-FB-075U-100D-935-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937269
REPORT IS A COMBINATION OF REPORTS P933495 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

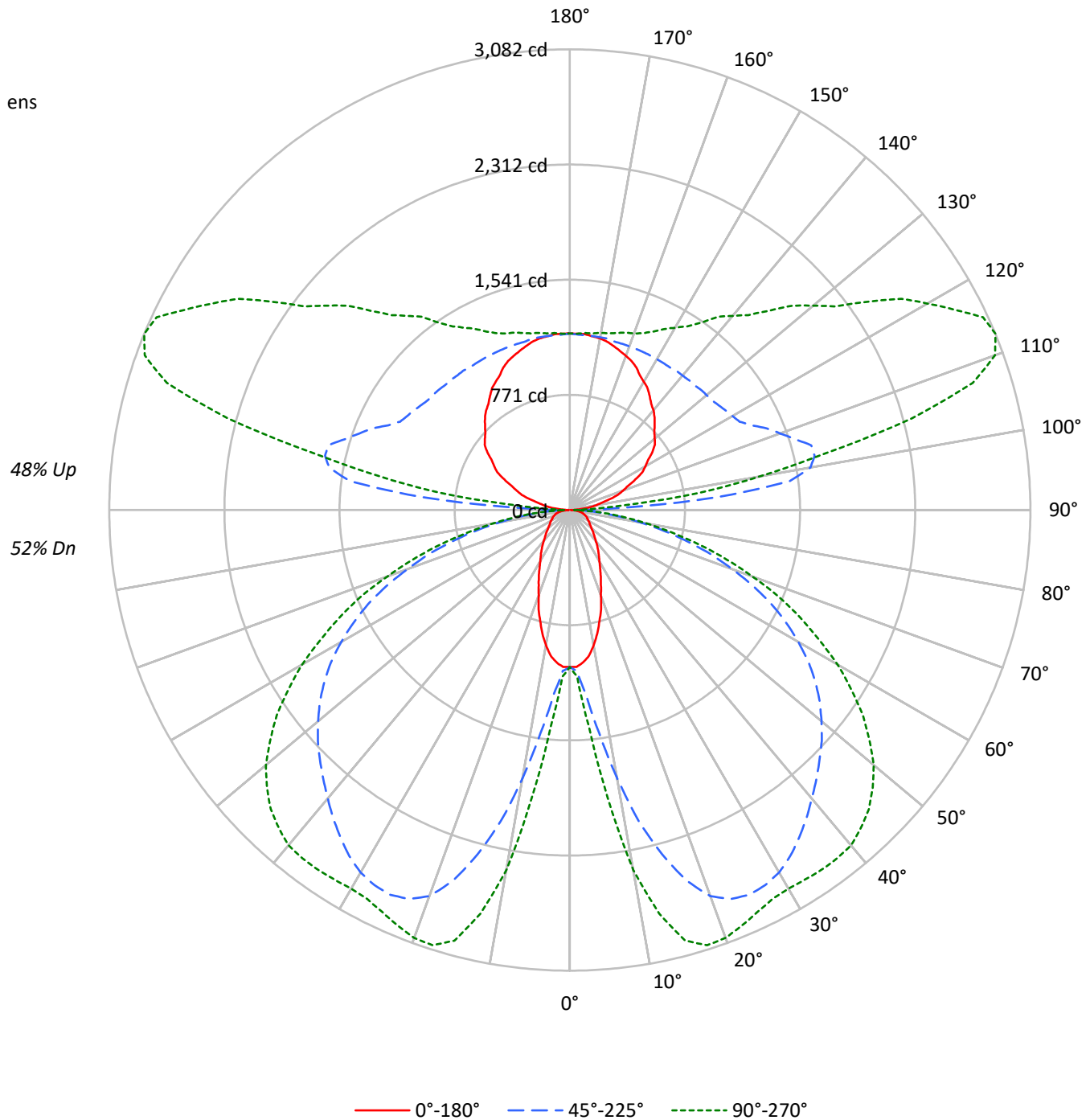
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15782.4 lumens
Efficiency: N/A
Efficacy: 102.8 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: General Diffuse

Input Watts (W): 153.6
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	50	30	10	0
RCR																					
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	58	58	58	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	50	49	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	43	41	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	38	35	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	33	30	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	30	26	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	27	23	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	24	20	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	22	18	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	20	17	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	19	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3249	3249	3249
5°	3175	3756	4366
10°	2881	5476	7239
15°	2449	7156	8741
20°	1995	8294	8908
25°	1664	8682	8727
30°	1404	8739	8711
35°	1242	8596	8936
40°	1083	8410	9169
45°	982	8274	9205
50°	901	8152	9052
55°	864	7973	8651
60°	885	7627	8017
65°	923	7098	7147
70°	985	6195	6038
75°	1096	5055	4712
80°	1206	3510	3175
85°	1092	1865	1625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9205 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.9	0.9
10°-20°	602.1	3.8
20°-30°	1053.2	6.7
30°-40°	1355.8	8.6
40°-50°	1514.3	9.6
50°-60°	1450.4	9.2
60°-70°	1149.4	7.3
70°-80°	675.9	4.3
80°-90°	192.3	1.2
90°-100°	575.5	3.6
100°-110°	1513.0	9.6
110°-120°	1568.8	9.9
120°-130°	1258.4	8.0
130°-140°	987.4	6.3
140°-150°	757.8	4.8
150°-160°	545.8	3.5
160°-170°	333.9	2.1
170°-180°	112.8	0.7
0°-30°	1791.1	11.3
0°-40°	3146.9	19.9
0°-60°	6111.6	38.7
0°-90°	8129.2	51.5
90°-120°	3657.2	23.2
90°-150°	6660.7	42.2
90°-180°	7653.0	48.5
0°-180°	15782.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1023	1098	1236	1398	1449	94
15°	766	1415	2384	2891	2982	213
25°	490	1604	2840	2965	2968	226
35°	331	1533	2675	2826	2938	207
45°	226	1222	2364	2708	2830	175
55°	162	777	2006	2330	2394	148
65°	128	412	1489	1675	1699	127
75°	95	253	817	898	902	99
85°	34	78	203	223	226	36
90°	8	22	60	30	30	9
95°	76	298	991	511	348	84
105°	273	413	1673	2540	2369	289
115°	484	588	1340	2673	3050	478
125°	674	755	1219	2059	2429	598
135°	803	883	1181	1662	1885	621
145°	931	990	1166	1418	1529	583
155°	1052	1082	1166	1280	1317	483
165°	1136	1150	1166	1212	1226	320
175°	1181	1181	1174	1188	1188	112
180°	1181	1181	1181	1181	1181	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1050.3	1050.3	1050.3	1050.3	1050.3	1050.3	1050.3	1050.3	1050.3	1050.3	1050.3
2.5°	1050.3	1050.3	1057.0	1060.4	1067.1	1070.5	1077.3	1084.0	1104.3	1107.7	1114.4
5°	1023.3	1036.7	1080.7	1097.5	1144.8	1209.0	1236.0	1279.9	1371.0	1398.0	1414.9
7.5°	982.7	1013.1	1121.1	1148.2	1266.3	1435.2	1506.2	1600.7	1745.9	1816.8	1874.2
10°	918.5	982.7	1175.2	1239.3	1431.9	1688.5	1820.2	1951.9	2171.4	2269.3	2306.4
12.5°	847.7	952.3	1232.6	1320.4	1597.3	1972.1	2130.9	2276.1	2526.0	2657.7	2677.9
15°	766.5	908.4	1286.6	1414.9	1772.9	2208.6	2384.2	2563.2	2796.2	2890.7	2914.4
17.5°	695.7	874.7	1337.3	1472.3	1908.0	2421.3	2600.3	2748.9	2938.0	3002.1	3019.1
20°	607.8	820.6	1371.0	1546.6	2049.8	2576.6	2748.9	2863.7	2992.0	3032.5	3039.3
22.5°	543.7	763.2	1391.3	1573.6	2144.4	2671.2	2816.4	2907.6	2995.4	3008.9	3012.2
25°	489.6	699.1	1387.9	1604.1	2225.4	2728.6	2840.1	2907.6	2958.2	2965.0	2965.0
27.5°	439.0	628.1	1374.4	1610.8	2286.3	2742.1	2829.9	2877.2	2900.8	2914.4	2914.4
30°	395.1	560.6	1340.6	1597.3	2313.3	2728.6	2799.5	2823.2	2846.8	2867.1	2877.2
32.5°	361.3	496.4	1290.0	1570.3	2316.6	2694.9	2745.5	2759.0	2792.8	2840.1	2856.9
35°	330.9	432.2	1232.6	1533.2	2296.3	2640.8	2674.6	2688.1	2755.6	2826.5	2850.2
37.5°	300.6	385.0	1158.3	1469.0	2266.0	2576.6	2600.3	2623.9	2728.6	2813.0	2840.1
40°	270.2	344.5	1070.5	1398.0	2218.7	2499.0	2519.2	2556.3	2694.9	2792.8	2819.8
42.5°	246.5	310.7	976.0	1323.8	2157.9	2411.2	2441.6	2495.6	2654.3	2759.0	2789.4
45°	226.3	276.9	874.7	1222.4	2080.2	2320.0	2363.9	2438.2	2607.0	2708.3	2735.3
47.5°	206.0	253.3	770.0	1117.8	1995.8	2228.8	2286.3	2370.6	2542.9	2640.8	2664.5
50°	189.1	229.6	665.2	1006.4	1904.6	2130.9	2198.4	2286.3	2461.9	2553.0	2583.4
52.5°	175.6	209.3	567.3	894.9	1799.9	2029.5	2107.3	2198.4	2363.9	2451.7	2472.0
55°	162.1	192.5	482.9	776.7	1691.9	1921.5	2005.9	2093.7	2255.8	2330.1	2343.6
57.5°	155.3	179.0	412.0	665.2	1577.1	1799.9	1894.5	1975.5	2127.5	2184.9	2198.4
60°	145.2	168.9	357.9	570.7	1452.1	1685.1	1766.2	1847.2	1975.5	2022.8	2033.0
62.5°	135.0	162.1	317.5	479.5	1323.8	1550.0	1631.1	1705.4	1813.5	1847.2	1860.7
65°	128.3	155.3	287.0	412.0	1192.1	1408.2	1489.2	1553.5	1641.2	1674.9	1681.8
67.5°	121.6	148.6	263.4	354.6	1060.4	1266.3	1327.2	1387.9	1455.5	1489.2	1492.6
70°	111.4	141.9	243.2	314.0	925.3	1104.3	1155.0	1219.1	1273.1	1290.0	1300.2
72.5°	104.7	131.7	229.6	283.6	786.8	949.0	996.2	1033.4	1080.7	1097.5	1097.5
75°	94.6	118.2	216.2	253.3	645.0	776.7	817.2	854.4	891.5	898.3	888.1
77.5°	84.4	104.7	185.7	212.7	503.2	614.6	648.4	668.6	699.1	705.8	709.2
80°	70.9	91.2	145.2	165.5	364.7	452.5	476.2	493.1	520.1	520.1	526.8
82.5°	54.0	70.9	104.7	118.2	246.5	310.7	330.9	341.1	357.9	357.9	357.9
85°	33.7	43.9	67.6	77.7	148.6	189.1	202.6	206.0	219.5	222.9	222.9
87.5°	16.9	23.6	43.9	47.3	77.7	97.9	97.9	104.7	104.7	101.3	97.9
90°	7.9	14.2	20.5	22.2	34.8	51.8	60.2	53.5	40.1	30.1	30.1
92.5°	31.7	85.5	139.5	152.9	215.0	297.7	339.1	297.2	213.4	150.5	144.6
95°	76.1	174.7	273.3	297.9	529.0	837.2	991.2	884.5	671.1	511.0	492.9
97.5°	131.5	218.5	305.5	327.3	712.6	1226.4	1483.2	1415.8	1280.9	1179.8	1145.3
100°	174.3	253.2	332.1	351.8	779.4	1349.5	1634.6	1639.5	1649.4	1656.8	1615.6
102.5°	210.8	284.4	357.9	376.3	810.0	1388.2	1677.4	1763.3	1935.1	2064.1	2028.9
105°	272.6	334.9	397.2	412.8	832.7	1392.7	1672.6	1865.3	2250.6	2539.5	2520.6
107.5°	335.9	394.0	452.2	466.7	837.0	1330.7	1577.6	1846.3	2383.6	2786.6	2791.2
110°	378.7	431.2	483.7	496.8	830.6	1275.8	1498.3	1798.7	2399.5	2850.0	2869.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	420.7	470.7	520.7	533.3	831.0	1227.8	1426.2	1733.6	2348.5	2809.6	2839.9
115°	484.1	530.2	576.4	587.9	838.5	1172.8	1339.9	1636.0	2228.3	2672.6	2714.6
117.5°	546.7	588.6	630.5	641.0	854.1	1138.3	1280.4	1547.7	2082.2	2483.2	2529.8
120°	583.2	622.6	662.0	671.9	866.8	1126.7	1256.6	1500.8	1989.2	2355.6	2400.9
122.5°	618.8	658.6	698.4	708.4	885.1	1120.6	1238.4	1458.3	1898.2	2228.1	2272.7
125°	673.5	709.8	746.1	755.1	909.6	1115.6	1218.6	1405.5	1779.1	2059.3	2100.4
127.5°	717.9	754.5	791.2	800.3	934.2	1112.7	1202.0	1362.4	1683.2	1923.8	1958.5
130°	741.7	781.1	820.5	830.4	952.1	1114.4	1195.6	1338.4	1624.0	1838.2	1870.2
132.5°	766.2	805.7	845.0	854.9	966.6	1115.6	1190.1	1317.9	1573.6	1765.3	1794.1
135°	802.7	838.5	874.5	883.4	982.5	1114.6	1180.6	1287.6	1501.7	1662.3	1687.0
137.5°	839.9	875.4	911.0	919.9	1006.3	1121.4	1179.0	1269.5	1450.5	1586.3	1606.5
140°	870.7	903.5	936.3	944.4	1020.8	1122.6	1173.5	1251.7	1408.0	1525.3	1544.2
142.5°	894.5	924.8	955.1	962.7	1033.0	1126.6	1173.5	1242.1	1379.5	1482.5	1498.8
145°	931.0	957.4	983.8	990.4	1048.8	1126.6	1165.5	1221.7	1334.1	1418.3	1430.7
147.5°	967.4	993.2	1018.9	1025.3	1072.1	1134.4	1165.5	1209.8	1298.1	1364.4	1374.6
150°	991.2	1014.5	1037.7	1043.5	1084.2	1138.4	1165.5	1202.9	1277.5	1333.5	1341.7
152.5°	1015.8	1033.4	1050.9	1055.4	1092.1	1141.1	1165.5	1197.4	1261.1	1308.9	1315.1
155°	1052.2	1065.3	1078.3	1081.5	1109.6	1146.9	1165.5	1190.9	1241.6	1279.6	1283.8
157.5°	1079.1	1091.8	1104.5	1107.7	1126.9	1152.7	1165.5	1185.2	1224.7	1254.2	1257.1
160°	1097.4	1107.3	1117.1	1119.6	1134.9	1155.3	1165.5	1182.4	1216.2	1241.6	1243.3
162.5°	1115.6	1123.0	1130.3	1132.2	1143.3	1158.1	1165.5	1179.8	1208.3	1229.7	1231.3
165°	1135.5	1142.1	1148.8	1150.5	1155.5	1162.2	1165.5	1175.8	1196.1	1211.5	1213.2
167.5°	1153.6	1156.8	1160.0	1160.8	1165.0	1170.6	1173.5	1180.1	1193.5	1203.5	1204.2
170°	1165.5	1168.7	1171.9	1172.7	1172.9	1173.3	1173.5	1180.1	1193.5	1203.5	1203.5
172.5°	1171.8	1172.5	1173.3	1173.5	1173.5	1173.5	1173.5	1178.7	1189.3	1197.2	1196.6
175°	1180.6	1180.6	1180.6	1180.6	1178.2	1175.1	1173.5	1176.8	1183.5	1188.5	1188.5
177.5°	1180.6	1180.6	1180.6	1180.6	1178.7	1176.3	1175.1	1177.7	1183.0	1186.9	1186.2
180°	1180.6	1180.6	1180.6	1180.6	1180.6	1180.6	1180.6	1180.6	1180.6	1180.6	1180.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1050.3	1050.3
2.5°	1121.1	1114.4
5°	1442.0	1448.7
7.5°	1941.8	1938.4
10°	2414.6	2444.9
12.5°	2759.0	2765.8
15°	2968.4	2981.9
17.5°	3049.4	3052.8
20°	3052.8	3046.1
22.5°	3015.7	3008.9
25°	2971.8	2968.4
27.5°	2931.2	2934.6
30°	2914.4	2924.5
32.5°	2914.4	2931.2
35°	2921.1	2938.0
37.5°	2917.7	2938.0
40°	2904.2	2927.8
42.5°	2867.1	2883.9
45°	2809.6	2829.9
47.5°	2735.3	2748.9
50°	2640.8	2654.3
52.5°	2522.6	2526.0
55°	2380.7	2394.3
57.5°	2228.8	2232.2
60°	2060.0	2070.1
62.5°	1881.0	1881.0
65°	1691.9	1698.6
67.5°	1496.0	1512.9
70°	1296.7	1300.2
72.5°	1100.9	1100.9
75°	898.3	901.7
77.5°	705.8	705.8
80°	523.5	526.8
82.5°	361.3	368.1
85°	226.3	226.3
87.5°	104.7	94.6
90°	30.1	30.1
92.5°	120.6	96.7
95°	420.4	347.9
97.5°	1007.2	869.2
100°	1451.2	1286.8
102.5°	1887.9	1747.1
105°	2444.8	2369.1
107.5°	2809.6	2827.9
110°	2948.6	3027.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2961.0	3082.2
115°	2882.5	3050.5
117.5°	2716.0	2902.3
120°	2581.9	2762.9
122.5°	2451.2	2629.8
125°	2264.9	2429.3
127.5°	2097.3	2236.0
130°	1998.5	2126.7
132.5°	1908.8	2023.7
135°	1786.0	1885.0
137.5°	1687.5	1768.5
140°	1619.9	1695.6
142.5°	1563.9	1629.0
145°	1479.9	1529.2
147.5°	1415.4	1456.3
150°	1374.9	1408.0
152.5°	1340.2	1365.2
155°	1300.3	1316.9
157.5°	1268.8	1280.4
160°	1250.0	1256.6
162.5°	1237.6	1244.0
165°	1219.8	1226.5
167.5°	1207.1	1209.9
170°	1203.5	1203.5
172.5°	1194.2	1191.7
175°	1188.5	1188.5
177.5°	1183.4	1180.6
180°	1180.6	1180.6



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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	5.24	6.16	6.18	7.11	8.36	18.43	19.35	19.37	20.31	21.55
	3H	5.95	6.77	6.90	7.74	9.01	20.28	21.10	21.23	22.07	23.34
	4H	6.25	7.03	7.21	8.00	9.28	20.93	21.71	21.89	22.68	23.96
	6H	6.50	7.22	7.48	8.20	9.49	21.37	22.09	22.34	23.07	24.36
	8H	6.57	7.26	7.55	8.25	9.54	21.50	22.18	22.47	23.18	24.46
	12H	6.59	7.25	7.58	8.23	9.55	21.57	22.22	22.55	23.21	24.52
4H	2H	12.47	13.25	13.44	14.22	15.50	18.71	19.49	19.68	20.46	21.74
	3H	14.04	14.70	15.02	15.70	16.99	20.77	21.42	21.75	22.42	23.72
	4H	14.14	14.74	15.13	15.73	17.05	21.54	22.14	22.53	23.13	24.45
	6H	14.15	14.67	15.15	15.69	17.00	22.09	22.60	23.09	23.62	24.94
	8H	14.13	14.61	15.13	15.63	16.95	22.25	22.74	23.26	23.75	25.08
	12H	14.09	14.53	15.11	15.55	16.89	22.35	22.79	23.37	23.82	25.15
8H	4H	15.59	16.07	16.59	17.09	18.42	21.61	22.09	22.61	23.10	24.43
	6H	15.84	16.24	16.86	17.29	18.62	22.24	22.64	23.27	23.70	25.02
	8H	15.86	16.21	16.89	17.25	18.59	22.47	22.82	23.50	23.86	25.20
	12H	15.83	16.14	16.86	17.17	18.56	22.62	22.93	23.65	23.96	25.35
12H	4H	15.74	16.18	16.76	17.20	18.54	21.56	22.00	22.58	23.03	24.36
	6H	16.10	16.45	17.13	17.49	18.84	22.23	22.58	23.26	23.62	24.96
	8H	16.17	16.48	17.21	17.52	18.90	22.46	22.77	23.50	23.81	25.20