

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: P1191256

Luminaire Tested: SQ2-FA-050U-050D-L940-UNV-STD-W-4

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191256
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2502-345-2)
Test Lab: INNOVATION CENTER
Issue Date: 9/23/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-FA-050U-050D-L940-UNV-STD-W-4
Description: CORELITE SQ2 LED LUMINAIRE
FROSTED CONTINUOUS ASYMMETRIC ROLL LENS
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

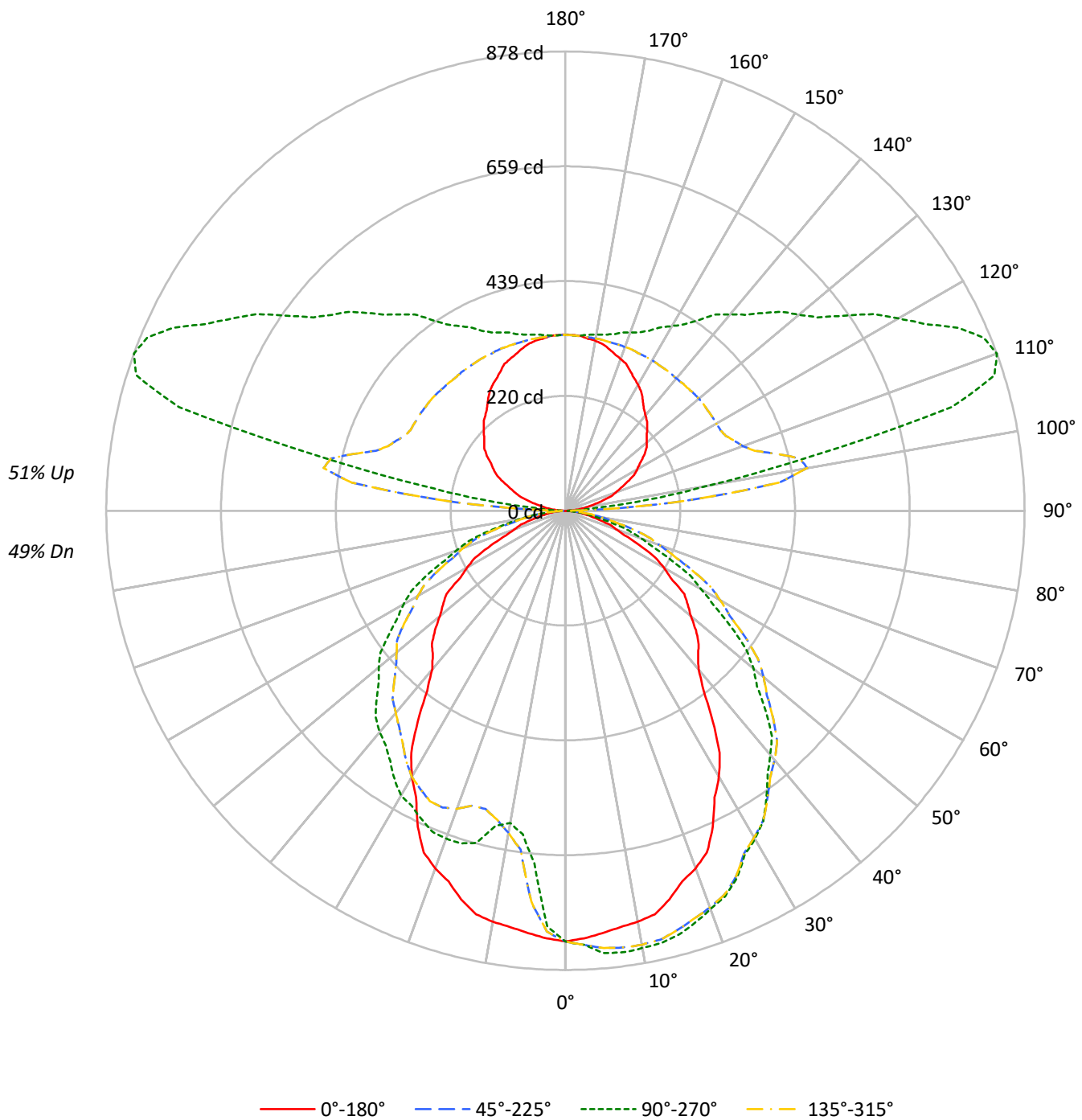
Lumens per Lamp: N/A
Luminaire Lumens: 4134.0 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 32.6
Input Voltage (V): 120
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
RC	80				70				50				30				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	107	107	107	107	99	99	99	99	83	83	83		69	69	69		49
1	98	94	90	86	90	86	83	80	73	71	68		61	59	58		42
2	89	82	76	71	82	76	70	66	64	60	57		53	51	48		35
3	81	72	65	59	75	67	60	55	56	52	48		47	44	41		30
4	74	64	56	50	68	59	52	47	50	45	41		42	38	35		26
5	68	57	49	43	63	53	45	40	45	39	35		38	33	30		22
6	63	51	43	37	58	47	40	35	40	35	31		34	30	26		19
7	58	46	38	32	53	43	36	30	37	31	27		31	27	23		17
8	54	42	34	29	50	39	32	27	33	28	24		28	24	21		15
9	50	38	30	25	46	35	29	24	31	25	21		26	22	19		14
10	47	35	28	23	43	32	26	22	28	23	19		24	20	17		13

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13294	13294	13294	13294
5°	13138	13759	13138	10966
10°	13082	13918	13082	9942
15°	12856	14029	12856	10989
20°	12502	13928	12502	11460
25°	11883	13816	11883	11598
30°	10948	13507	10948	11721
35°	9688	13210	9688	11511
40°	8340	12848	8340	11637
45°	8234	12387	8234	11659
50°	7857	11783	7857	11703
55°	7817	10871	7817	11589
60°	7007	9688	7007	11541
65°	5975	8535	5975	11217
70°	4820	7232	4820	10395
75°	4180	5970	4180	9557
80°	3561	4454	3561	7717
85°	2371	2371	2371	4724

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 12826 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	1.8
10°-20°	207.0	5.0
20°-30°	314.4	7.6
30°-40°	369.1	8.9
40°-50°	374.5	9.1
50°-60°	328.1	7.9
60°-70°	232.7	5.6
70°-80°	119.9	2.9
80°-90°	25.6	0.6
90°-100°	134.0	3.2
100°-110°	424.9	10.3
110°-120°	416.6	10.1
120°-130°	339.0	8.2
130°-140°	276.4	6.7
140°-150°	215.5	5.2
150°-160°	155.3	3.8
160°-170°	94.9	2.3
170°-180°	32.0	0.8
0°-30°	595.5	14.4
0°-40°	964.6	23.3
0°-60°	1667.2	40.3
0°-90°	2045.3	49.5
90°-120°	975.5	23.6
90°-150°	1806.5	43.7
90°-180°	2089.0	50.5
0°-180°	4134.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	823	823	823	823	823	
5°	811	849	811	677	811	77
15°	769	839	769	657	769	216
25°	667	776	667	651	667	304
35°	492	670	492	584	492	306
45°	361	542	361	511	361	276
55°	278	386	278	412	278	240
65°	156	223	156	294	156	156
75°	67	96	67	153	67	72
85°	13	13	13	26	13	16
90°	0	3	0	3	0	1
95°	18	58	18	58	18	21
105°	74	765	74	765	74	78
115°	132	827	132	827	132	131
125°	183	649	183	649	183	163
135°	221	534	221	534	221	171
145°	258	445	258	445	258	162
155°	294	380	294	380	294	136
165°	320	349	320	349	320	90
175°	335	336	335	336	335	32
180°	336	336	336	336	336	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	823.4	823.4	823.4	823.4	823.4	823.4	823.4	823.4	823.4	823.4	823.4
2.5°	818.3	830.8	831.0	831.0	831.0	831.0	831.0	830.8	818.3	818.3	805.5
5°	810.6	832.5	839.3	842.7	848.9	842.7	839.3	832.5	810.6	801.3	750.0
7.5°	803.0	832.3	842.5	848.3	851.5	848.3	842.5	832.3	803.0	761.1	653.6
10°	797.9	832.2	842.5	845.8	848.9	845.8	842.5	832.2	797.9	713.6	625.5
12.5°	790.2	827.0	840.0	843.2	846.4	843.2	840.0	827.0	790.2	671.0	605.1
15°	769.1	819.1	829.8	836.2	839.3	836.2	829.8	819.1	769.1	634.9	590.4
17.5°	743.0	803.5	817.6	823.4	825.9	823.4	817.6	803.5	743.0	602.5	591.0
20°	727.6	793.2	807.4	810.6	810.6	810.6	807.4	793.2	727.6	587.2	606.4
22.5°	707.2	780.2	794.7	795.4	797.9	795.4	794.7	780.2	707.2	569.3	614.0
25°	667.0	751.3	772.3	769.3	775.5	769.3	772.3	751.3	667.0	545.3	612.8
27.5°	617.9	724.0	739.1	742.3	742.3	742.3	739.1	724.0	617.9	521.7	600.0
30°	587.2	705.8	721.3	724.5	724.5	724.5	721.3	705.8	587.2	506.1	587.2
32.5°	548.9	690.0	703.4	704.0	704.0	704.0	703.4	690.0	548.9	490.3	566.8
35°	491.5	663.1	673.4	673.3	670.2	673.3	673.4	663.1	491.5	466.5	542.5
37.5°	434.0	628.8	642.8	638.2	635.1	638.2	642.8	628.8	434.0	442.1	522.1
40°	395.7	607.9	622.3	612.7	609.6	612.7	622.3	607.9	395.7	423.8	504.2
42.5°	375.3	585.0	599.3	587.1	584.0	587.1	599.3	585.0	375.3	405.9	488.9
45°	360.6	547.9	561.7	548.8	542.5	548.8	561.7	547.9	360.6	379.4	462.8
47.5°	338.3	503.1	522.8	503.5	497.2	503.5	522.8	503.1	338.3	352.0	439.1
50°	312.8	475.0	494.7	475.4	469.1	475.4	494.7	475.0	312.8	331.5	421.3
52.5°	294.9	447.2	464.0	442.2	435.9	442.2	464.0	447.2	294.9	306.1	405.9
55°	277.7	405.6	418.1	395.5	386.2	395.5	418.1	405.6	277.7	268.3	376.6
57.5°	237.4	359.1	372.1	346.3	335.7	346.3	372.1	359.1	237.4	229.3	345.9
60°	217.0	326.2	341.5	315.6	300.0	315.6	341.5	326.2	217.0	201.4	325.5
62.5°	194.0	290.8	310.8	285.0	269.4	285.0	310.8	290.8	194.0	183.4	302.5
65°	156.4	240.6	264.9	239.0	223.4	239.0	264.9	240.6	156.4	162.6	264.9
67.5°	122.6	194.9	222.1	193.8	181.3	193.8	222.1	194.9	122.6	143.1	230.4
70°	102.1	164.5	191.5	165.7	153.2	165.7	191.5	164.5	102.1	130.2	207.4
72.5°	89.4	136.8	166.0	137.6	127.7	137.6	166.0	136.8	89.4	117.4	179.4
75°	67.0	95.1	127.7	102.0	95.7	102.0	127.7	95.1	67.0	95.1	140.4
77.5°	48.5	61.6	90.0	68.2	65.7	68.2	90.0	61.6	48.5	71.6	102.1
80°	38.3	41.4	67.0	47.9	47.9	47.9	67.0	41.4	38.3	53.9	76.6
82.5°	25.5	28.7	46.6	32.5	30.0	32.5	46.6	28.7	25.5	38.6	53.6
85°	12.8	12.8	19.1	12.8	12.8	12.8	19.1	12.8	12.8	19.0	25.5
87.5°	2.6	2.8	5.7	3.2	3.2	3.2	5.7	2.8	2.6	5.3	5.7
90°	0.0	1.0	3.2	3.2	3.2	3.2	3.2	1.0	0.0	1.0	3.2
92.5°	5.9	23.5	75.1	25.0	17.6	25.0	75.1	23.5	5.9	23.5	75.1
95°	18.0	54.2	243.3	90.2	58.2	90.2	243.3	54.2	18.0	54.2	243.3
97.5°	33.4	70.2	412.1	257.5	158.0	257.5	412.1	70.2	33.4	70.2	412.1
100°	44.4	79.6	469.6	428.1	278.2	428.1	469.6	79.6	44.4	79.6	469.6
102.5°	56.3	89.8	459.5	628.7	481.2	628.7	459.5	89.8	56.3	89.8	459.5
105°	74.0	104.0	418.8	797.8	764.7	797.8	418.8	104.0	74.0	104.0	418.8
107.5°	91.8	119.5	380.1	815.4	860.1	815.4	380.1	119.5	91.8	119.5	380.1
110°	103.7	130.5	360.7	795.1	877.9	795.1	360.7	130.5	103.7	130.5	360.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	115.5	140.7	349.7	760.1	865.2	760.1	349.7	140.7	115.5	140.7	349.7
115°	132.2	157.0	338.5	703.0	827.1	703.0	338.5	157.0	132.2	157.0	338.5
117.5°	148.5	172.1	334.0	648.0	773.2	648.0	334.0	172.1	148.5	172.1	334.0
120°	158.7	181.4	333.2	614.1	735.1	614.1	333.2	181.4	158.7	181.4	333.2
122.5°	168.8	190.7	333.2	586.8	699.5	586.8	333.2	190.7	168.8	190.7	333.2
125°	183.0	204.7	333.2	551.2	649.4	551.2	333.2	204.7	183.0	204.7	333.2
127.5°	195.5	216.3	333.2	523.5	607.3	523.5	333.2	216.3	195.5	216.3	333.2
130°	203.1	224.8	333.2	507.3	582.8	507.3	333.2	224.8	203.1	224.8	333.2
132.5°	210.7	232.4	332.3	494.4	562.5	494.4	332.3	232.4	210.7	232.4	332.3
135°	221.1	242.8	331.1	474.1	534.1	474.1	331.1	242.8	221.1	242.8	331.1
137.5°	231.2	254.0	330.8	454.7	508.3	454.7	330.8	254.0	231.2	254.0	330.8
140°	238.0	260.7	330.0	441.1	489.7	441.1	330.0	260.7	238.0	260.7	330.0
142.5°	246.4	268.4	330.8	427.5	472.8	427.5	330.8	268.4	246.4	268.4	330.8
145°	258.1	277.7	331.1	409.1	445.3	409.1	331.1	277.7	258.1	277.7	331.1
147.5°	269.7	286.5	331.3	392.9	422.4	392.9	331.3	286.5	269.7	286.5	331.3
150°	278.2	291.6	332.1	383.4	407.2	383.4	332.1	291.6	278.2	291.6	332.1
152.5°	284.9	296.7	332.1	375.7	395.4	375.7	332.1	296.7	284.9	296.7	332.1
155°	294.0	304.4	332.1	365.2	379.7	365.2	332.1	304.4	294.0	304.4	332.1
157.5°	303.8	310.8	333.2	358.8	368.7	358.8	333.2	310.8	303.8	310.8	333.2
160°	308.8	315.0	333.2	354.5	362.8	354.5	333.2	315.0	308.8	315.0	333.2
162.5°	313.9	318.5	333.2	351.1	356.9	351.1	333.2	318.5	313.9	318.5	333.2
165°	320.5	323.6	333.2	345.9	349.0	345.9	333.2	323.6	320.5	323.6	333.2
167.5°	326.6	327.4	334.2	342.3	345.0	342.3	334.2	327.4	326.6	327.4	334.2
170°	330.0	330.0	334.2	340.6	341.6	340.6	334.2	330.0	330.0	330.0	334.2
172.5°	331.7	332.5	334.2	338.9	339.1	338.9	334.2	332.5	331.7	332.5	334.2
175°	335.3	334.2	335.3	337.4	336.3	337.4	335.3	334.2	335.3	334.2	335.3
177.5°	336.3	335.5	335.5	337.1	335.5	337.1	335.5	335.5	336.3	335.5	335.5
180°	336.3	336.3	336.3	336.3	336.3	336.3	336.3	336.3	336.3	336.3	336.3

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	823.4	823.4	823.4	823.4	823.4	823.4
2.5°	797.8	795.3	797.8	805.5	818.3	818.3
5°	692.2	676.6	692.2	750.0	801.3	810.6
7.5°	629.2	624.2	629.2	653.6	761.1	803.0
10°	606.4	606.4	606.4	625.5	713.6	797.9
12.5°	604.1	616.6	604.1	605.1	671.0	790.2
15°	641.8	657.4	641.8	590.4	634.9	769.1
17.5°	654.5	667.0	654.5	591.0	602.5	743.0
20°	654.5	667.0	654.5	606.4	587.2	727.6
22.5°	652.0	664.5	652.0	614.0	569.3	707.2
25°	644.8	651.0	644.8	612.8	545.3	667.0
27.5°	632.0	636.4	632.0	600.0	521.7	617.9
30°	619.3	628.7	619.3	587.2	506.1	587.2
32.5°	606.4	608.3	606.4	566.8	490.3	548.9
35°	587.1	584.0	587.1	542.5	466.5	491.5
37.5°	561.1	564.9	561.1	522.1	442.1	434.0
40°	545.9	552.1	545.9	504.2	423.8	395.7
42.5°	530.6	536.8	530.6	488.9	405.9	375.3
45°	507.5	510.6	507.5	462.8	379.4	360.6
47.5°	480.7	483.8	480.7	439.1	352.0	338.3
50°	462.8	465.9	462.8	421.3	331.5	312.8
52.5°	442.4	445.5	442.4	405.9	306.1	294.9
55°	411.7	411.7	411.7	376.6	268.3	277.7
57.5°	376.7	380.4	376.7	345.9	229.3	237.4
60°	351.2	357.4	351.2	325.5	201.4	217.0
62.5°	328.2	331.9	328.2	302.5	183.4	194.0
65°	290.5	293.6	290.5	264.9	162.6	156.4
67.5°	248.3	250.8	248.3	230.4	143.1	122.6
70°	220.2	220.2	220.2	207.4	130.2	102.1
72.5°	192.2	194.7	192.2	179.4	117.4	89.4
75°	150.1	153.2	150.1	140.4	95.1	67.0
77.5°	107.9	111.1	107.9	102.1	71.6	48.5
80°	79.9	83.0	79.9	76.6	53.9	38.3
82.5°	56.8	57.4	56.8	53.6	38.6	25.5
85°	25.5	25.5	25.5	25.5	19.0	12.8
87.5°	5.7	5.7	5.7	5.7	5.3	2.6
90°	3.2	3.2	3.2	3.2	1.0	0.0
92.5°	25.0	17.6	25.0	75.1	23.5	5.9
95°	90.2	58.2	90.2	243.3	54.2	18.0
97.5°	257.5	158.0	257.5	412.1	70.2	33.4
100°	428.1	278.2	428.1	469.6	79.6	44.4
102.5°	628.7	481.2	628.7	459.5	89.8	56.3
105°	797.8	764.7	797.8	418.8	104.0	74.0
107.5°	815.4	860.1	815.4	380.1	119.5	91.8
110°	795.1	877.9	795.1	360.7	130.5	103.7

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	760.1	865.2	760.1	349.7	140.7	115.5
115°	703.0	827.1	703.0	338.5	157.0	132.2
117.5°	648.0	773.2	648.0	334.0	172.1	148.5
120°	614.1	735.1	614.1	333.2	181.4	158.7
122.5°	586.8	699.5	586.8	333.2	190.7	168.8
125°	551.2	649.4	551.2	333.2	204.7	183.0
127.5°	523.5	607.3	523.5	333.2	216.3	195.5
130°	507.3	582.8	507.3	333.2	224.8	203.1
132.5°	494.4	562.5	494.4	332.3	232.4	210.7
135°	474.1	534.1	474.1	331.1	242.8	221.1
137.5°	454.7	508.3	454.7	330.8	254.0	231.2
140°	441.1	489.7	441.1	330.0	260.7	238.0
142.5°	427.5	472.8	427.5	330.8	268.4	246.4
145°	409.1	445.3	409.1	331.1	277.7	258.1
147.5°	392.9	422.4	392.9	331.3	286.5	269.7
150°	383.4	407.2	383.4	332.1	291.6	278.2
152.5°	375.7	395.4	375.7	332.1	296.7	284.9
155°	365.2	379.7	365.2	332.1	304.4	294.0
157.5°	358.8	368.7	358.8	333.2	310.8	303.8
160°	354.5	362.8	354.5	333.2	315.0	308.8
162.5°	351.1	356.9	351.1	333.2	318.5	313.9
165°	345.9	349.0	345.9	333.2	323.6	320.5
167.5°	342.3	345.0	342.3	334.2	327.4	326.6
170°	340.6	341.6	340.6	334.2	330.0	330.0
172.5°	338.9	339.1	338.9	334.2	332.5	331.7
175°	337.4	336.3	337.4	335.3	334.2	335.3
177.5°	337.1	335.5	337.1	335.5	335.5	336.3
180°	336.3	336.3	336.3	336.3	336.3	336.3

TEST NUMBER: P1191256

CATALOG NUMBER: SQ2-FA-050U-050D-L940-UNV-STD-W-4

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	15.29	16.15	16.25	17.12	18.40	16.52	17.37	17.48	18.35	19.63
	3H	16.38	17.15	17.35	18.13	19.43	17.76	18.53	18.73	19.51	20.81
	4H	16.73	17.46	17.72	18.45	19.76	18.15	18.87	19.14	19.86	21.17
	6H	16.90	17.56	17.89	18.56	19.88	18.31	18.98	19.31	19.97	21.29
	8H	16.93	17.57	17.93	18.58	19.90	18.33	18.97	19.34	19.98	21.30
	12H	16.93	17.53	17.94	18.54	19.88	18.32	18.92	19.33	19.93	21.27
4H	2H	16.22	16.94	17.21	17.93	19.24	17.13	17.85	18.12	18.84	20.15
	3H	17.59	18.19	18.59	19.21	20.53	18.58	19.19	19.58	20.20	21.53
	4H	18.03	18.58	19.04	19.59	20.94	19.05	19.60	20.06	20.61	21.96
	6H	18.26	18.73	19.28	19.77	21.11	19.27	19.74	20.29	20.78	22.12
	8H	18.32	18.76	19.34	19.79	21.14	19.32	19.76	20.34	20.79	22.15
	12H	18.32	18.72	19.36	19.76	21.12	19.31	19.71	20.35	20.75	22.11
8H	4H	18.43	18.87	19.45	19.90	21.26	19.26	19.70	20.28	20.73	22.09
	6H	18.78	19.14	19.82	20.21	21.57	19.57	19.93	20.61	21.00	22.36
	8H	18.89	19.21	19.95	20.27	21.64	19.66	19.98	20.72	21.04	22.41
	12H	18.93	19.21	19.99	20.26	21.68	19.68	19.96	20.73	21.01	22.43
12H	4H	18.43	18.83	19.48	19.88	21.24	19.23	19.63	20.27	20.67	22.03
	6H	18.85	19.17	19.90	20.22	21.60	19.59	19.91	20.64	20.97	22.34
	8H	18.99	19.27	20.05	20.32	21.74	19.70	19.98	20.76	21.03	22.45