

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: HALO

Report Number: P639467

Luminaire Tested: RL3059FSD2W1EWH -500LM -4000K

Issue Date: 1/25/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P639467  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2206886A001)  
Test Lab:  
Issue Date: 1/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: RL3059FSD2W1EWH -500LM -4000K  
Description: 3IN RETROFIT, 500LM SELECTABLE CCT, MATTE WHITE BAFFLE  
Light Source: (1) DEDICATED LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

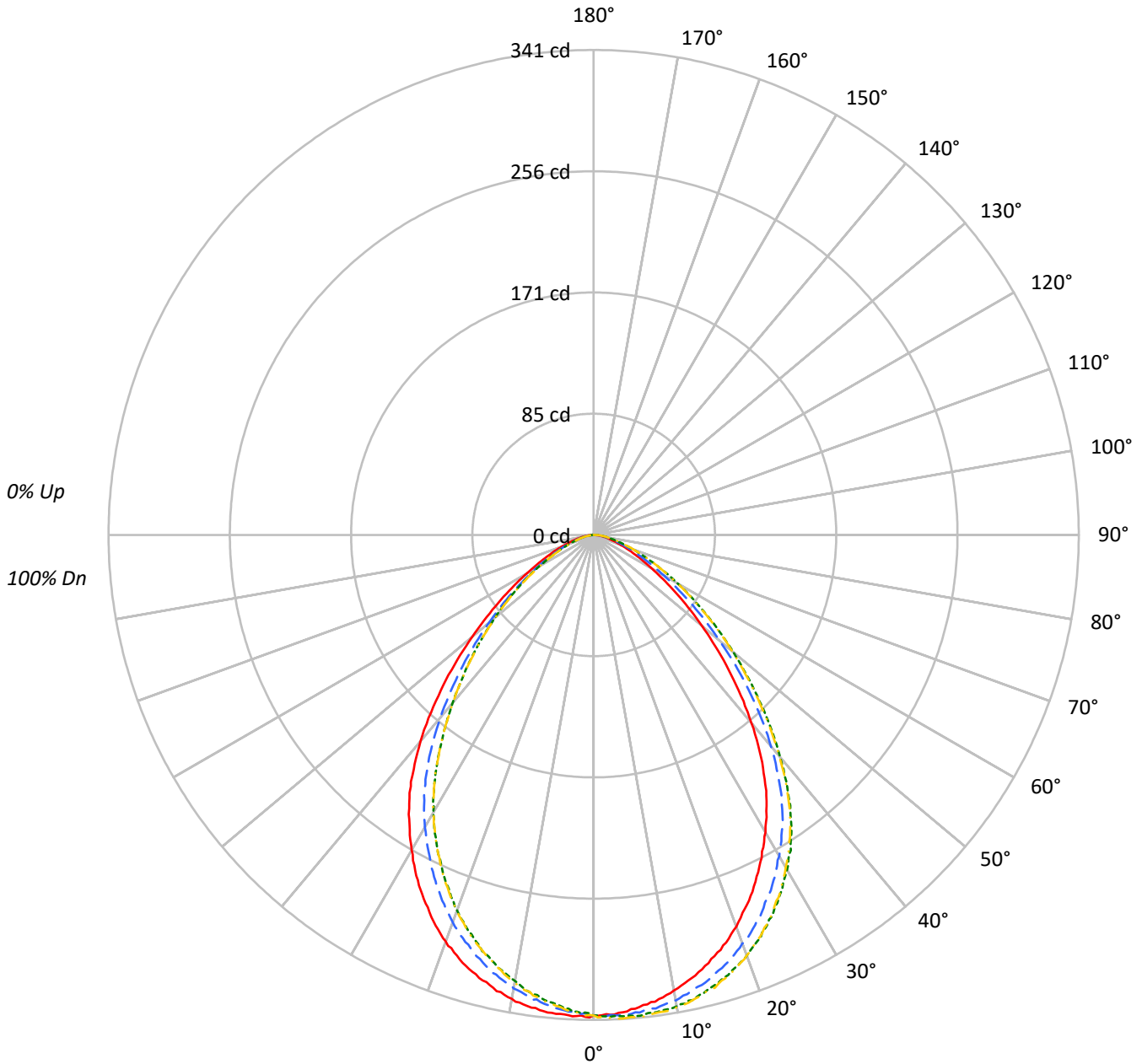
Lumens per Lamp: N/A  
Luminaire Lumens: 615.0 lumens  
Efficiency: N/A  
Efficacy: 94.6 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.11 / 1.16  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 6.5  
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										
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89								
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78								
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68								
4	88	78	71	65	86	77	70	65	75	69	64	72	67	63	70	66	62	60								
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	60	56	54								
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48								
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	43								
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	39								
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36								
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	74095	74095	74095	74095
5°	73608	74752	74268	72683
10°	72410	74949	73768	70896
15°	70784	74439	72622	68763
20°	68443	73460	70963	65526
25°	65109	71665	68351	61504
30°	61123	68821	64795	57097
35°	56108	64621	60445	51076
40°	49321	58309	54159	44140
45°	41555	51013	46361	37461
50°	33875	43768	38037	30907
55°	26723	36548	30470	24888
60°	20744	29910	23858	19341
65°	16292	23868	18938	14476
70°	12823	18657	15195	11028
75°	9913	14657	12115	8642
80°	8334	12502	10355	6566
85°	5535	12831	9057	2516

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 112.5°  
 Vertical Angle: 45°  
 Luminance: 51292 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.8	5.2
10°-20°	88.7	14.4
20°-30°	126.4	20.5
30°-40°	134.6	21.9
40°-50°	109.6	17.8
50°-60°	69.9	11.4
60°-70°	35.8	5.8
70°-80°	14.7	2.4
80°-90°	3.5	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	246.9	40.1
0°-40°	381.5	62.0
0°-60°	560.9	91.2
0°-90°	615.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	615.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	338	338	338	338	338	
5°	334	340	337	330	334	32
15°	312	328	320	303	312	88
25°	269	296	282	254	269	123
35°	210	241	226	191	210	130
45°	134	164	150	121	134	104
55°	70	96	80	65	70	63
65°	31	46	36	28	31	32
75°	12	17	14	10	12	13
85°	2	5	4	1	2	3
90°	0	1	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	337.9	337.9	337.9	337.9	337.9	337.9	337.9	337.9	337.9	337.9	337.9
0.5°	338.2	338.0	337.5	337.1	337.9	338.5	339.2	338.1	339.3	337.8	337.8
1°	337.8	338.0	338.3	337.7	338.5	338.9	339.2	338.7	338.9	338.2	336.4
1.5°	337.2	337.8	338.4	338.7	338.6	339.5	340.0	339.0	338.1	338.1	337.0
2°	337.5	337.4	337.8	338.5	339.0	338.5	339.8	339.2	338.5	336.8	336.4
2.5°	337.5	337.2	338.1	339.4	338.7	339.3	340.1	339.4	338.8	337.2	335.6
3°	336.5	337.0	338.2	338.6	338.7	339.9	340.6	339.5	338.2	337.0	335.8
3.5°	336.3	337.2	338.0	338.8	339.1	340.4	340.6	339.0	337.8	336.4	335.0
4°	336.0	336.4	338.2	338.4	339.0	339.9	340.3	339.2	337.6	335.5	334.3
4.5°	334.5	336.3	337.8	338.5	339.2	340.2	340.1	338.7	337.9	335.8	333.8
5°	334.4	335.8	337.0	338.8	339.6	339.3	340.4	338.6	337.4	335.0	333.6
5.5°	333.6	335.4	337.4	338.2	339.6	340.0	340.7	337.8	337.5	333.8	332.2
6°	332.4	334.5	336.3	338.3	339.2	339.0	340.3	337.9	336.7	334.5	331.6
6.5°	332.3	333.8	336.4	337.7	338.4	339.8	340.1	337.8	336.3	333.3	330.6
7°	331.0	333.4	335.6	337.0	338.4	339.9	339.4	336.8	335.2	332.4	329.1
7.5°	331.0	333.7	335.8	337.2	338.5	339.2	339.0	336.6	335.3	331.8	329.7
8°	329.5	331.9	334.7	336.3	338.0	339.1	338.8	336.1	334.6	331.2	327.9
8.5°	328.8	331.4	334.0	337.1	337.7	338.0	338.8	335.2	333.9	330.3	326.7
9°	327.5	330.7	333.4	335.5	337.6	338.2	338.7	336.2	333.0	329.6	325.4
9.5°	326.7	329.6	332.2	335.6	337.3	337.6	337.6	334.4	332.8	328.5	324.5
10°	325.2	328.3	332.3	334.8	336.6	337.3	337.3	333.8	331.3	327.3	323.9
10.5°	324.3	328.1	331.4	333.2	335.5	336.8	336.5	333.7	330.6	326.9	321.4
11°	322.8	326.9	330.0	333.4	335.8	335.6	336.2	333.0	329.4	326.0	321.0
11.5°	321.7	325.5	329.5	333.1	334.2	335.3	335.5	331.5	328.1	324.5	319.6
12°	320.2	324.9	328.2	331.8	334.4	334.8	334.5	330.6	328.1	322.6	318.4
12.5°	319.1	323.2	327.0	331.0	333.1	333.2	333.6	329.5	326.2	321.3	316.6
13°	318.0	321.6	325.9	329.7	331.8	333.1	333.0	328.8	324.9	320.1	316.1
13.5°	316.2	320.2	325.4	329.3	331.4	331.5	331.2	327.4	323.3	319.2	314.1
14°	314.8	319.3	324.4	327.9	330.0	331.2	330.6	326.6	322.8	317.6	312.5
14.5°	313.0	318.0	323.0	326.3	328.9	330.2	330.0	325.9	321.9	316.6	310.6
15°	311.8	316.6	321.8	325.7	327.9	329.2	329.6	324.1	319.9	315.3	308.7
15.5°	309.3	315.4	320.0	324.4	327.0	328.4	327.6	322.5	318.8	313.1	307.5
16°	308.2	313.7	318.6	323.3	325.5	326.7	326.0	321.3	317.7	312.2	305.7
16.5°	306.2	311.8	317.7	322.7	324.3	325.1	325.3	319.6	316.0	310.5	303.6
17°	305.2	310.0	316.0	320.4	323.7	324.7	324.0	318.4	314.7	308.1	301.3
17.5°	302.7	308.8	314.7	319.3	321.8	322.9	322.6	316.6	313.0	306.6	300.2
18°	301.4	306.7	313.1	318.7	320.5	322.5	321.5	316.1	311.0	304.8	297.9
18.5°	299.4	305.4	311.3	316.5	319.3	320.2	319.5	314.0	309.6	302.6	296.5
19°	296.9	303.7	309.4	315.6	317.7	318.7	317.8	312.8	307.2	300.9	293.9
19.5°	295.0	301.6	308.0	313.6	316.6	317.3	316.7	310.0	306.5	299.2	292.1
20°	293.3	299.3	305.7	312.2	314.8	315.6	314.7	309.1	304.1	296.5	289.7
20.5°	290.6	297.7	305.4	309.5	312.7	313.5	313.1	306.7	302.6	294.8	287.5
21°	288.4	295.3	302.9	308.5	311.0	311.8	311.2	305.4	300.5	293.0	285.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	281.5	289.1	296.8	303.1	306.6	306.8	305.9	299.0	294.2	285.9	278.3
23°	279.4	286.6	294.1	300.9	303.4	305.0	303.6	296.9	291.8	283.9	275.7
23.5°	276.7	285.0	293.1	298.9	301.9	302.9	301.0	295.0	289.3	281.4	272.9
24°	274.6	282.4	290.6	297.1	300.2	300.2	299.7	293.2	286.6	279.3	271.0
24.5°	271.5	280.1	288.1	295.1	297.3	299.0	297.2	290.5	284.8	276.5	267.8
25°	269.1	277.9	285.1	292.4	296.2	296.0	295.5	288.1	282.5	274.3	265.3
25.5°	266.2	274.9	283.3	290.1	293.6	294.5	292.9	286.1	279.9	272.1	262.3
26°	264.0	272.4	281.3	288.0	290.8	292.5	290.1	283.0	277.7	269.0	260.1
26.5°	260.9	270.0	279.3	286.1	289.2	289.3	287.6	281.6	275.4	266.5	256.9
27°	258.1	267.4	276.3	283.9	286.7	287.2	286.2	278.9	272.3	263.5	254.0
27.5°	255.9	264.9	273.7	281.6	284.3	284.7	283.6	275.6	270.1	260.9	251.4
28°	252.1	262.4	271.7	278.7	282.5	282.8	281.0	273.1	267.1	258.1	248.5
28.5°	250.0	258.9	268.8	276.4	279.0	279.8	277.7	270.3	264.2	255.3	245.7
29°	247.0	256.0	266.1	273.9	276.5	276.7	275.5	267.5	261.8	252.1	242.9
29.5°	243.7	253.7	262.8	271.0	274.2	274.2	272.9	265.2	258.1	249.6	239.9
30°	241.4	250.6	261.0	268.6	271.8	272.2	270.0	262.6	255.9	246.7	237.4
30.5°	238.1	248.5	257.9	266.1	269.5	269.3	267.4	260.3	252.7	243.8	234.1
31°	235.4	245.0	255.1	263.8	265.9	266.7	264.8	256.7	250.2	241.0	231.3
31.5°	232.7	242.5	252.7	260.3	263.2	263.4	262.1	253.7	247.4	237.7	228.3
32°	229.0	239.8	249.0	257.7	261.5	261.2	259.2	251.1	244.1	234.8	225.0
32.5°	226.2	236.5	246.2	255.0	257.7	258.4	255.9	248.4	240.8	231.7	221.4
33°	223.0	233.6	244.0	251.9	254.6	254.9	253.3	244.9	238.1	229.1	218.9
33.5°	219.9	230.6	240.8	249.2	251.7	251.8	250.2	242.2	235.6	225.0	215.5
34°	217.1	227.0	237.5	245.4	248.7	248.7	247.2	238.8	232.0	222.7	211.6
34.5°	212.8	223.3	233.9	242.4	244.9	246.0	244.3	235.4	229.0	219.0	208.7
35°	209.6	220.1	230.5	238.3	241.4	242.3	240.1	232.7	225.8	216.1	204.8
35.5°	205.6	217.1	227.9	235.6	238.2	238.9	237.5	229.1	222.8	212.4	201.2
36°	202.7	213.5	224.2	231.9	235.2	235.1	233.7	225.7	218.7	209.2	197.6
36.5°	199.1	209.8	220.2	228.2	230.9	231.5	229.7	222.0	215.9	205.6	194.3
37°	195.4	206.3	216.5	224.4	226.8	228.0	226.2	218.1	211.7	201.6	190.2
37.5°	191.7	202.3	213.1	221.0	223.8	224.0	223.1	214.5	207.7	197.8	186.4
38°	187.9	198.9	208.9	217.2	219.8	220.2	218.4	210.7	204.4	194.4	182.8
38.5°	184.3	194.7	205.5	213.3	215.5	215.9	214.9	207.1	200.8	190.4	179.0
39°	180.2	191.4	201.8	209.5	212.0	212.4	210.9	202.8	196.6	186.7	175.4
39.5°	176.7	187.4	197.8	205.9	207.8	208.3	207.0	199.3	192.9	183.2	171.4
40°	172.3	183.7	193.9	202.0	203.7	204.4	202.9	194.9	189.2	179.0	167.5
40.5°	168.5	179.5	189.8	198.1	200.0	200.5	199.2	191.7	185.3	174.9	163.9
41°	164.9	175.8	186.3	194.0	196.1	196.5	195.1	187.7	181.6	170.9	159.9
41.5°	160.6	171.7	182.1	190.1	192.2	192.5	190.8	183.6	177.0	167.5	156.0
42°	157.4	168.1	178.3	186.1	188.4	188.7	187.0	179.5	173.5	163.3	152.4
42.5°	153.3	163.9	174.0	182.3	184.3	184.9	183.3	175.2	169.3	159.3	148.7
43°	149.3	160.0	169.8	178.2	180.4	180.8	179.6	171.5	165.4	155.6	144.9
43.5°	145.5	155.9	165.9	173.8	176.2	176.8	175.2	167.5	161.0	151.6	140.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	134.0	144.1	154.3	162.2	164.5	165.4	163.5	155.2	149.5	139.6	130.0
45.5°	130.8	139.9	150.3	158.2	161.0	161.2	159.4	151.5	145.5	136.1	126.6
46°	126.9	136.2	146.2	154.0	156.9	157.8	156.1	148.0	141.9	132.0	123.1
46.5°	123.3	132.4	142.1	150.4	153.3	153.9	151.9	144.2	137.5	128.4	119.4
47°	119.7	128.4	138.1	146.8	149.5	150.3	148.6	139.9	133.8	124.5	115.9
47.5°	116.2	124.7	134.7	142.5	145.9	146.7	144.6	136.7	130.0	121.0	112.8
48°	112.6	120.7	130.6	139.4	141.9	143.1	141.0	132.5	126.4	117.3	109.2
48.5°	109.0	117.2	126.9	135.0	138.7	139.4	137.5	129.3	122.5	113.7	106.0
49°	105.9	113.6	123.2	131.5	135.1	136.0	134.0	125.3	118.6	110.4	102.6
49.5°	102.5	110.0	119.0	127.9	131.5	132.7	130.2	121.8	115.2	106.8	99.4
50°	99.3	106.4	115.8	124.4	128.3	129.1	126.9	118.3	111.5	103.3	96.2
50.5°	96.0	103.2	112.1	120.6	124.5	125.6	123.5	114.6	108.1	100.0	93.1
51°	92.9	99.7	108.5	117.0	121.1	122.5	120.2	111.4	104.7	96.6	90.2
51.5°	89.8	96.3	105.2	113.7	117.7	119.1	116.9	107.8	101.3	93.6	87.1
52°	86.8	93.1	101.5	110.1	114.4	116.0	113.4	104.9	97.8	90.2	84.3
52.5°	83.7	90.1	98.4	106.8	111.1	112.7	110.4	101.5	94.8	87.3	81.7
53°	80.9	86.8	95.3	103.6	108.0	109.3	107.0	98.3	91.4	84.1	78.9
53.5°	78.0	83.8	92.1	100.3	105.1	106.2	103.9	95.2	88.5	81.4	76.2
54°	75.1	81.0	88.6	97.2	101.6	103.2	100.7	92.1	85.3	78.6	73.4
54.5°	72.6	77.9	85.8	94.1	98.5	100.1	97.5	89.1	82.6	75.8	70.8
55°	69.9	75.0	82.9	91.2	95.6	97.2	94.9	86.2	79.7	73.0	68.1
55.5°	67.3	72.4	79.9	88.1	92.7	94.3	91.8	83.4	76.9	70.3	65.6
56°	64.7	69.7	77.3	85.1	89.6	91.3	89.0	80.6	74.0	67.8	63.3
56.5°	62.5	67.1	74.2	82.3	86.9	88.4	86.0	77.8	71.3	65.2	60.9
57°	60.0	64.5	71.7	79.2	84.0	85.8	83.3	75.0	68.6	62.6	58.5
57.5°	57.7	62.1	69.0	76.5	81.4	82.9	80.6	72.4	66.2	60.3	56.4
58°	55.5	59.8	66.5	73.9	78.7	80.2	78.0	70.0	63.6	58.1	54.2
58.5°	53.3	57.4	63.9	71.4	76.0	77.6	75.4	67.5	61.4	55.7	52.2
59°	51.2	55.4	61.4	68.9	73.3	74.9	72.8	65.0	58.9	53.5	50.1
59.5°	49.3	53.1	59.2	66.2	70.7	72.3	70.3	62.7	56.7	51.4	48.1
60°	47.3	51.0	57.0	63.8	68.2	69.8	67.7	60.2	54.4	49.5	46.2
60.5°	45.4	49.0	54.7	61.6	65.8	67.4	65.1	58.0	52.4	47.6	44.3
61°	43.6	47.2	52.6	59.1	63.2	65.1	62.9	55.8	50.3	45.5	42.6
61.5°	41.8	45.3	50.5	56.9	61.0	62.6	60.7	53.7	48.5	43.8	40.8
62°	40.1	43.4	48.7	54.7	58.8	60.3	58.5	51.6	46.6	42.0	39.1
62.5°	38.6	41.8	46.6	52.6	56.4	58.1	56.2	49.8	44.7	40.4	37.6
63°	37.0	40.0	44.8	50.4	54.1	55.9	54.0	47.7	42.9	38.7	35.9
63.5°	35.5	38.5	42.9	48.5	51.9	53.6	51.9	46.0	41.1	37.2	34.5
64°	34.1	36.9	41.2	46.5	50.0	51.4	50.0	43.9	39.5	35.7	33.0
64.5°	32.8	35.4	39.6	44.6	47.9	49.5	48.0	42.2	38.0	34.3	31.6
65°	31.4	34.3	38.1	42.9	46.0	47.5	46.0	40.5	36.5	32.8	30.3
65.5°	30.1	32.9	36.4	40.9	44.0	45.5	44.1	38.9	34.9	31.4	28.9
66°	28.7	31.5	34.9	39.2	42.1	43.6	42.3	37.3	33.5	30.2	27.8





TEST NUMBER: P639467

CATALOG NUMBER: RL3059FSD2W1EWH -500LM -4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	25.2	27.5	30.8	34.4	36.9	38.3	37.2	32.6	29.6	26.6	24.3
68°	24.1	26.4	29.5	33.0	35.2	36.5	35.5	31.3	28.3	25.4	23.2
68.5°	23.0	25.3	28.1	31.6	33.6	35.0	34.0	30.0	27.1	24.5	22.1
69°	22.0	24.2	26.9	30.1	32.1	33.4	32.4	28.6	26.0	23.3	21.1
69.5°	21.0	23.1	25.7	28.7	30.6	31.8	31.0	27.3	24.8	22.3	20.1
70°	20.0	22.0	24.5	27.4	29.1	30.4	29.5	26.1	23.7	21.2	19.2
70.5°	19.0	21.0	23.4	26.2	27.8	28.8	28.2	25.0	22.6	20.3	18.3
71°	18.0	20.0	22.4	24.9	26.5	27.6	27.0	23.8	21.5	19.2	17.3
71.5°	17.1	19.0	21.3	23.7	25.2	26.2	25.6	22.6	20.5	18.4	16.5
72°	16.4	18.1	20.2	22.5	23.9	24.9	24.4	21.6	19.5	17.4	15.6
72.5°	15.5	17.1	19.2	21.5	22.8	23.7	23.2	20.5	18.6	16.6	14.8
73°	14.7	16.4	18.3	20.3	21.6	22.5	22.0	19.5	17.6	15.8	14.0
73.5°	13.9	15.6	17.4	19.3	20.5	21.4	20.9	18.5	16.8	14.9	13.2
74°	13.2	14.8	16.5	18.3	19.4	20.2	19.8	17.5	16.0	14.1	12.5
74.5°	12.4	14.0	15.7	17.4	18.3	19.2	18.9	16.7	15.1	13.3	11.9
75°	11.7	13.2	14.9	16.5	17.3	18.2	17.8	15.8	14.3	12.6	11.3
75.5°	11.1	12.5	14.1	15.7	16.5	17.1	16.9	15.0	13.5	11.9	10.8
76°	10.5	11.8	13.3	14.8	15.6	16.3	16.0	14.1	12.7	11.3	10.3
76.5°	10.1	11.1	12.6	14.0	14.7	15.4	15.2	13.3	11.9	10.7	9.8
77°	9.6	10.5	11.8	13.2	13.9	14.5	14.3	12.6	11.3	10.2	9.3
77.5°	9.1	10.0	11.2	12.5	13.1	13.7	13.5	11.8	10.6	9.8	8.8
78°	8.6	9.5	10.5	11.7	12.3	12.9	12.7	11.1	10.2	9.2	8.2
78.5°	8.1	9.0	10.0	11.1	11.6	12.1	11.9	10.4	9.7	8.7	7.7
79°	7.6	8.5	9.5	10.5	10.9	11.4	11.2	10.0	9.2	8.2	7.2
79.5°	7.1	8.1	9.1	10.0	10.4	10.8	10.6	9.5	8.7	7.7	6.7
80°	6.6	7.6	8.6	9.5	9.9	10.2	10.0	9.0	8.2	7.2	6.2
80.5°	6.1	7.1	8.1	9.0	9.4	9.7	9.5	8.5	7.7	6.7	5.7
81°	5.6	6.6	7.6	8.5	8.9	9.2	9.0	8.0	7.2	6.2	5.4
81.5°	5.2	6.1	7.1	8.0	8.4	8.7	8.5	7.5	6.7	5.8	4.9
82°	4.8	5.6	6.6	7.5	7.9	8.2	8.0	7.0	6.2	5.4	4.4
82.5°	4.3	5.3	6.1	7.0	7.4	7.7	7.5	6.5	5.7	4.9	4.0
83°	3.9	4.8	5.6	6.5	6.9	7.2	7.0	6.0	5.4	4.5	3.6
83.5°	3.5	4.3	5.3	6.0	6.4	6.7	6.5	5.6	4.9	4.0	3.2
84°	3.1	3.9	4.8	5.6	5.9	6.2	6.0	5.2	4.5	3.6	2.8
84.5°	2.6	3.5	4.4	5.2	5.5	5.7	5.6	4.7	4.0	3.2	2.3
85°	2.2	3.1	3.9	4.7	5.1	5.3	5.2	4.3	3.6	2.8	2.0
85.5°	1.8	2.7	3.5	4.3	4.6	4.9	4.8	3.9	3.2	2.4	1.6
86°	1.4	2.2	3.1	3.8	4.2	4.4	4.3	3.4	2.8	2.0	1.2
86.5°	1.0	1.8	2.7	3.4	3.7	4.0	3.9	3.0	2.4	1.6	0.8
87°	0.7	1.4	2.3	3.0	3.3	3.6	3.4	2.6	2.0	1.2	0.5
87.5°	0.4	1.0	1.8	2.6	2.9	3.1	3.0	2.2	1.6	0.9	0.2
88°	0.1	0.7	1.4	2.2	2.5	2.7	2.6	1.8	1.2	0.5	0.0
88.5°	0.0	0.4	1.1	1.8	2.1	2.3	2.2	1.4	0.9	0.2	0.0



TEST NUMBER: P639467

CATALOG NUMBER: RL3059FSD2W1EWH -500LM -4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.1	0.7	0.9	1.2	1.1	0.4	0.1	0.0	0.0



TEST NUMBER: P639467

CATALOG NUMBER: RL3059FSD2W1EWH -500LM -4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	337.9	337.9	337.9	337.9	337.9	337.9
0.5°	336.9	336.5	336.8	337.5	338.0	338.2
1°	336.6	335.9	336.6	337.9	337.1	337.8
1.5°	336.6	336.4	335.6	337.0	337.5	337.2
2°	335.2	335.4	335.4	336.0	336.2	337.5
2.5°	335.0	335.5	334.8	335.8	336.4	337.5
3°	334.0	333.6	333.4	335.1	335.6	336.5
3.5°	334.2	333.5	332.8	334.2	334.5	336.3
4°	333.0	332.2	331.9	332.9	334.3	336.0
4.5°	331.6	331.2	330.4	332.3	334.0	334.5
5°	332.1	330.2	329.9	331.3	333.1	334.4
5.5°	330.2	329.7	329.4	330.7	331.9	333.6
6°	329.3	329.0	327.8	329.6	331.0	332.4
6.5°	328.8	327.7	327.4	328.4	329.6	332.3
7°	327.8	325.9	326.6	327.2	329.6	331.0
7.5°	326.4	325.8	324.4	326.6	327.7	331.0
8°	325.0	324.5	324.2	324.3	326.7	329.5
8.5°	324.0	323.5	322.3	324.0	326.7	328.8
9°	322.9	321.7	320.5	322.8	324.7	327.5
9.5°	321.3	319.9	319.1	321.5	324.3	326.7
10°	319.8	318.4	318.4	319.7	321.6	325.2
10.5°	318.5	317.2	317.4	318.4	320.6	324.3
11°	317.8	315.7	314.6	316.8	319.3	322.8
11.5°	316.4	314.1	313.4	315.3	318.1	321.7
12°	314.7	312.7	312.2	313.0	316.5	320.2
12.5°	313.0	311.5	310.7	311.6	314.8	319.1
13°	311.2	309.2	308.3	310.2	314.0	318.0
13.5°	309.6	307.5	306.5	307.6	312.2	316.2
14°	307.2	305.5	304.2	307.2	310.8	314.8
14.5°	306.4	304.1	302.9	304.5	308.7	313.0
15°	304.3	302.9	300.5	302.6	307.2	311.8
15.5°	302.7	299.8	298.7	300.7	305.6	309.3
16°	300.1	298.1	296.8	298.8	303.7	308.2
16.5°	298.4	296.1	294.6	296.7	301.8	306.2
17°	296.5	293.7	292.4	295.0	299.0	305.2
17.5°	294.4	292.2	290.0	292.5	297.2	302.7
18°	292.5	289.9	287.8	290.4	295.0	301.4
18.5°	290.0	287.5	286.1	288.0	293.8	299.4
19°	287.7	285.6	283.7	285.9	290.6	296.9
19.5°	286.4	283.2	281.4	283.8	288.7	295.0
20°	283.2	280.8	278.8	280.7	287.0	293.3
20.5°	280.7	278.9	277.0	278.9	284.7	290.6
21°	279.0	275.4	273.7	276.1	282.4	288.4

TEST NUMBER: P639467

CATALOG NUMBER: RL3059FSD2W1EWH -500LM -4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	271.7	267.7	266.5	268.3	274.7	281.5
23°	268.5	265.8	263.7	266.2	272.8	279.4
23.5°	266.3	262.9	261.0	263.4	269.6	276.7
24°	263.2	260.3	258.5	260.7	267.5	274.6
24.5°	260.3	257.1	255.9	257.7	264.8	271.5
25°	257.9	254.2	253.0	255.0	261.2	269.1
25.5°	255.2	251.5	250.3	251.7	259.1	266.2
26°	252.4	249.5	247.1	249.4	256.5	264.0
26.5°	249.3	246.3	243.9	246.4	253.4	260.9
27°	246.8	243.3	241.6	243.7	250.9	258.1
27.5°	243.8	240.3	238.4	240.4	247.8	255.9
28°	240.8	237.6	235.4	237.5	245.1	252.1
28.5°	237.6	234.7	232.5	234.4	241.8	250.0
29°	235.0	231.3	229.0	231.9	239.2	247.0
29.5°	231.9	228.2	226.5	228.4	236.7	243.7
30°	229.2	225.5	223.5	225.2	232.7	241.4
30.5°	225.9	221.6	219.7	222.4	229.7	238.1
31°	222.9	219.2	216.6	219.2	226.9	235.4
31.5°	219.9	215.3	213.2	215.2	224.2	232.7
32°	216.3	211.9	209.4	212.0	221.0	229.0
32.5°	213.1	208.9	205.9	208.5	217.6	226.2
33°	209.5	204.6	202.3	205.4	213.8	223.0
33.5°	206.0	201.5	198.8	201.8	210.9	219.9
34°	202.6	197.7	194.7	197.8	207.6	217.1
34.5°	198.9	194.1	191.3	194.1	203.5	212.8
35°	194.7	190.8	187.7	190.1	200.1	209.6
35.5°	191.2	186.6	184.2	186.7	196.6	205.6
36°	188.0	182.9	180.4	183.5	193.0	202.7
36.5°	184.0	179.1	176.3	179.5	188.8	199.1
37°	180.6	175.8	173.2	175.6	184.9	195.4
37.5°	176.5	172.0	169.5	172.1	181.8	191.7
38°	172.9	168.2	165.5	168.4	178.1	187.9
38.5°	169.5	165.0	162.3	164.5	174.0	184.3
39°	165.2	161.1	158.9	160.9	171.0	180.2
39.5°	161.8	157.6	155.6	157.3	166.7	176.7
40°	157.9	154.2	151.8	154.1	163.2	172.3
40.5°	154.5	150.8	148.5	150.2	159.6	168.5
41°	150.9	147.3	145.0	146.9	155.8	164.9
41.5°	147.1	143.6	141.4	143.5	151.7	160.6
42°	143.5	140.3	138.4	140.0	148.3	157.4
42.5°	140.1	136.7	134.9	136.5	144.3	153.3
43°	136.9	133.6	131.7	133.1	141.0	149.3
43.5°	133.2	130.4	128.5	129.8	137.6	145.5

TEST NUMBER: P639467

CATALOG NUMBER: RL3059FSD2W1EWH -500LM -4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	123.1	120.8	118.8	119.9	127.1	134.0
45.5°	119.6	117.4	115.9	117.1	123.9	130.8
46°	116.4	114.2	112.4	113.8	120.0	126.9
46.5°	113.2	111.2	109.7	110.5	117.0	123.3
47°	109.9	108.1	106.6	107.4	113.7	119.7
47.5°	106.6	105.2	103.6	104.8	110.1	116.2
48°	103.6	102.1	100.7	101.5	106.8	112.6
48.5°	100.5	99.2	97.7	98.6	104.0	109.0
49°	97.5	96.0	95.0	95.7	100.7	105.9
49.5°	94.6	93.5	92.3	92.8	97.6	102.5
50°	91.7	90.6	89.4	90.1	94.9	99.3
50.5°	88.7	87.8	86.5	87.2	91.7	96.0
51°	85.8	85.0	84.0	84.6	88.8	92.9
51.5°	83.3	82.5	81.5	81.8	86.0	89.8
52°	80.6	79.9	79.0	79.4	83.2	86.8
52.5°	77.9	77.4	76.2	76.7	80.4	83.7
53°	75.1	74.6	73.8	74.1	77.6	80.9
53.5°	72.5	72.3	71.5	71.9	75.1	78.0
54°	70.2	69.8	69.1	69.2	72.2	75.1
54.5°	67.6	67.5	66.6	66.9	69.8	72.6
55°	65.3	65.1	64.2	64.3	67.5	69.9
55.5°	63.0	62.7	62.0	62.2	65.1	67.3
56°	60.5	60.5	59.7	60.0	62.5	64.7
56.5°	58.4	58.3	57.7	57.7	60.3	62.5
57°	56.1	56.1	55.4	55.5	58.0	60.0
57.5°	54.0	54.0	53.3	53.4	55.7	57.7
58°	52.0	51.8	51.3	51.2	53.6	55.5
58.5°	50.0	49.9	49.3	49.3	51.6	53.3
59°	48.0	47.9	47.3	47.3	49.5	51.2
59.5°	45.9	46.0	45.4	45.4	47.5	49.3
60°	44.1	44.1	43.5	43.4	45.6	47.3
60.5°	42.4	42.3	41.5	41.6	43.8	45.4
61°	40.6	40.3	39.7	39.9	42.0	43.6
61.5°	39.0	38.8	38.2	38.2	40.2	41.8
62°	37.3	37.1	36.4	36.5	38.6	40.1
62.5°	35.7	35.4	34.8	34.9	37.0	38.6
63°	34.0	34.3	33.3	33.4	35.4	37.0
63.5°	32.6	32.7	31.8	31.9	34.3	35.5
64°	31.2	31.1	30.3	30.5	32.8	34.1
64.5°	29.7	29.5	28.8	29.0	31.3	32.8
65°	28.4	27.9	27.4	27.6	29.9	31.4
65.5°	27.2	26.7	26.1	26.4	28.4	30.1
66°	25.9	25.4	24.9	25.1	27.1	28.7



TEST NUMBER: P639467

CATALOG NUMBER: RL3059FSD2W1EWH -500LM -4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	22.5	22.0	21.4	21.7	23.6	25.2
68°	21.5	20.9	20.4	20.7	22.5	24.1
68.5°	20.4	19.9	19.4	19.6	21.5	23.0
69°	19.5	18.9	18.4	18.6	20.5	22.0
69.5°	18.5	18.0	17.5	17.8	19.5	21.0
70°	17.6	17.2	16.7	16.8	18.4	20.0
70.5°	16.8	16.3	15.9	16.1	17.6	19.0
71°	15.9	15.5	15.0	15.2	16.8	18.0
71.5°	15.1	14.7	14.2	14.4	15.9	17.1
72°	14.3	13.9	13.4	13.6	15.1	16.4
72.5°	13.5	13.2	12.7	12.8	14.3	15.5
73°	12.8	12.5	12.1	12.1	13.5	14.7
73.5°	12.2	11.9	11.5	11.6	12.7	13.9
74°	11.6	11.3	10.9	11.1	12.0	13.2
74.5°	11.1	10.8	10.4	10.5	11.4	12.4
75°	10.5	10.2	9.8	10.0	10.9	11.7
75.5°	10.0	9.6	9.3	9.4	10.4	11.1
76°	9.5	9.1	8.7	8.9	9.8	10.5
76.5°	8.9	8.5	8.2	8.3	9.3	10.1
77°	8.4	8.0	7.7	7.8	8.8	9.6
77.5°	7.9	7.5	7.2	7.3	8.3	9.1
78°	7.4	7.0	6.7	6.8	7.8	8.6
78.5°	6.8	6.5	6.2	6.3	7.3	8.1
79°	6.3	6.0	5.7	5.8	6.8	7.6
79.5°	5.8	5.6	5.3	5.4	6.3	7.1
80°	5.5	5.2	4.8	5.0	5.8	6.6
80.5°	5.0	4.7	4.4	4.5	5.4	6.1
81°	4.5	4.2	3.9	4.1	5.0	5.6
81.5°	4.1	3.8	3.5	3.6	4.5	5.2
82°	3.7	3.4	3.1	3.2	4.1	4.8
82.5°	3.2	3.0	2.7	2.8	3.6	4.3
83°	2.8	2.5	2.3	2.4	3.2	3.9
83.5°	2.4	2.1	1.9	2.0	2.8	3.5
84°	2.0	1.7	1.5	1.6	2.4	3.1
84.5°	1.6	1.4	1.1	1.2	2.0	2.6
85°	1.3	1.0	0.8	0.8	1.6	2.2
85.5°	0.9	0.6	0.4	0.5	1.2	1.8
86°	0.6	0.3	0.2	0.2	0.8	1.4
86.5°	0.3	0.1	0.0	0.1	0.5	1.0
87°	0.1	0.0	0.0	0.0	0.2	0.7
87.5°	0.0	0.0	0.0	0.0	0.1	0.4
88°	0.0	0.0	0.0	0.0	0.0	0.1
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P639467

CATALOG NUMBER: RL3059FSD2W1EWH -500LM -4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.0	0.0

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Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9



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— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - 135°-315°

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21.5°	285.5	293.8	300.9	306.9	309.4	310.6	309.0	303.4	298.2	290.9	283.2
22°	283.6	290.9	298.7	305.6	307.9	308.6	307.2	301.6	296.4	288.9	280.1



44°	141.7	152.0	162.2	169.7	172.7	173.1	171.2	163.7	157.0	147.6	137.6
44.5°	138.0	148.1	158.0	165.8	168.7	169.0	167.3	159.6	153.2	143.8	133.9



66.5°	27.6	30.1	33.6	37.7	40.3	41.8	40.4	35.6	32.1	28.9	26.6
67°	26.4	28.7	32.2	36.0	38.5	40.0	38.8	34.1	30.8	27.8	25.4



89°	0.0	0.1	0.7	1.4	1.7	1.9	1.8	1.1	0.5	0.1	0.0
89.5°	0.0	0.0	0.4	1.0	1.3	1.5	1.4	0.7	0.2	0.0	0.0



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21.5°	276.5	273.4	272.1	273.9	280.0	285.5
22°	273.7	270.2	269.5	271.4	277.8	283.6



44°	129.7	127.0	125.2	126.5	133.7	141.7
44.5°	126.3	123.8	122.0	123.2	130.3	138.0

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66.5°	24.7	24.2	23.6	24.0	25.9	27.6
67°	23.6	23.1	22.5	22.8	24.7	26.4

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89°	0.0	0.0	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	0.0

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(END OF REPORT)