

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: HALO

Report Number: P522096

Luminaire Tested: **RLLV4069BLE40AWHDM-4000K-UNIT**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522096  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A1809075A001)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: RLLV4069BLE40AWHDM-4000K-UNIT  
Description: Surface Mount Downlight Fixture, Single Unit  
Light Source: (16) 4000K CCT, 93 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

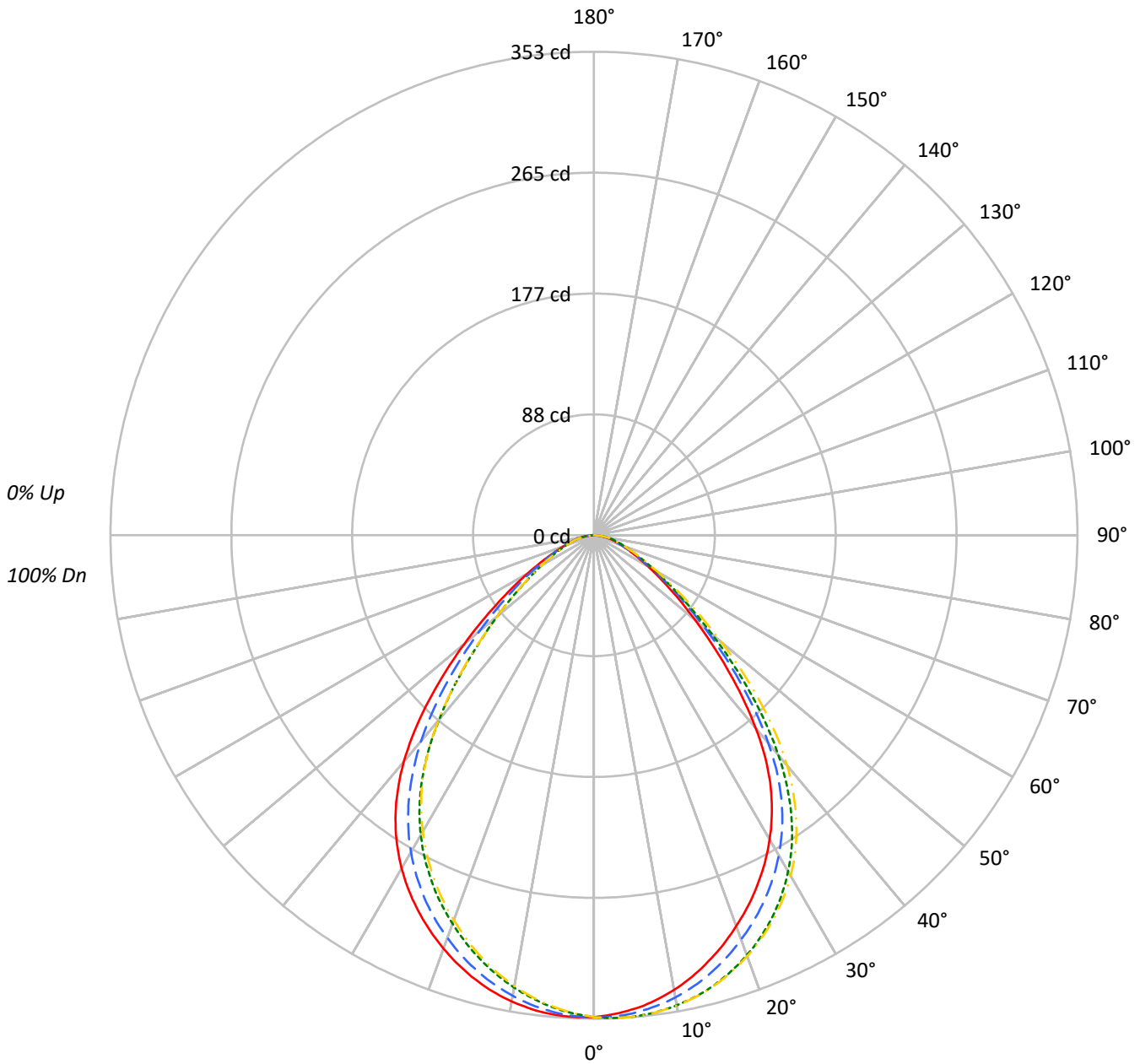
Lumens per Lamp: 644.87 (16 lamps)  
Luminaire Lumens: 645.0 lumens  
Efficiency: 6.3%  
Efficacy: 104.0 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.19  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 6.2  
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: 25 FT



TEST NUMBER: P522096  
CATALOG NUMBER: RLLV4069BLE40AWHDM-4000K-UNIT

### Luminous Intensity Polar Plot



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



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				20
RC	80				70				50				30				10				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6
1	7	7	6	6	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
2	6	6	6	5	6	6	6	5	6	5	5	6	5	5	5	5	5	5	5	5	5
3	6	5	5	5	6	5	5	5	5	5	5	5	5	4	5	5	4	5	5	4	4
4	6	5	4	4	5	5	4	4	5	4	4	5	4	4	4	4	4	4	4	4	4
5	5	4	4	4	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3
6	5	4	4	3	5	4	4	3	4	4	3	4	3	3	4	3	3	4	3	3	3
7	4	4	3	3	4	4	3	3	4	3	3	4	3	3	3	3	3	3	3	3	3
8	4	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2
9	4	3	3	2	4	3	3	2	3	3	2	3	3	2	3	3	2	3	3	2	2
10	4	3	3	2	4	3	3	2	3	2	2	3	2	2	3	2	2	3	2	2	2

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

	0°	90°	180°	270°
0°	43492	43492	43492	43492
5°	43026	43733	43547	42914
10°	42293	43736	43372	42092
15°	41239	43491	42941	41022
20°	39957	42916	42232	39707
25°	38470	41988	41333	38156
30°	36591	40459	40074	36092
35°	33963	37961	38127	33042
40°	29622	33800	34833	28396
45°	23981	27948	29749	22827
50°	18632	21650	23785	17728
55°	14415	16376	18251	13747
60°	11321	12705	13892	10926
65°	9124	10236	10733	9037
70°	7769	8673	8492	7914
75°	6924	8070	7545	7449
80°	6050	7758	7189	6406
85°	3545	6523	5814	3403



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	33.1	5.1	0.3
10°-20°	92.8	14.4	0.9
20°-30°	134.8	20.9	1.3
30°-40°	147.2	22.8	1.4
40°-50°	115.8	18.0	1.1
50°-60°	66.6	10.3	0.6
60°-70°	33.9	5.3	0.3
70°-80°	16.7	2.6	0.2
80°-90°	4.1	0.6	0.0
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	260.7	40.4	2.5
0°-40°	407.9	63.2	4.0
0°-60°	590.3	91.5	5.7
0°-90°	645.0	100.0	6.3
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	645.0	100.0	6.3

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	352	352	352	352	352	
5°	347	352	351	346	347	33
15°	322	340	336	321	322	91
25°	282	308	303	280	282	130
35°	225	252	253	219	225	139
45°	137	160	170	131	137	106
55°	67	76	85	64	67	61
65°	31	35	37	31	31	32
75°	14	17	16	16	14	15
85°	2	5	4	2	2	3
90°	0	0	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°	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9
0.5°	351.5	351.6	352.1	353.1	352.0	352.0	352.0	351.9	351.9	351.8	352.0
1°	351.2	351.5	352.1	353.1	352.3	352.3	352.2	352.1	352.0	351.8	351.9
1.5°	350.8	351.3	352.0	353.1	352.5	352.5	352.5	352.2	352.0	351.8	351.7
2°	350.4	351.0	351.9	353.1	352.7	352.7	352.7	352.3	352.1	351.8	351.5
2.5°	349.9	350.7	351.7	353.0	352.8	352.8	352.8	352.4	352.0	351.6	351.2
3°	349.4	350.3	351.4	352.9	352.8	352.9	352.8	352.4	351.9	351.3	350.9
3.5°	348.8	349.9	351.1	352.7	352.8	352.9	352.8	352.4	351.8	351.1	350.6
4°	348.2	349.4	350.7	352.5	352.8	352.9	352.8	352.3	351.6	350.8	350.2
4.5°	347.5	348.9	350.3	352.3	352.7	352.9	352.7	352.2	351.4	350.4	349.7
5°	346.8	348.3	349.8	351.9	352.5	352.8	352.5	352.0	351.0	350.0	349.2
5.5°	346.1	347.7	349.3	351.6	352.4	352.6	352.4	351.7	350.7	349.5	348.6
6°	345.4	347.0	348.7	351.1	352.1	352.4	352.2	351.4	350.4	349.0	348.0
6.5°	344.5	346.3	348.1	350.7	351.8	352.2	351.9	351.0	349.9	348.5	347.3
7°	343.5	345.5	347.4	350.1	351.5	351.8	351.5	350.6	349.5	347.8	346.7
7.5°	342.5	344.7	346.7	349.6	351.1	351.5	351.1	350.1	348.9	347.2	345.9
8°	341.5	343.9	346.0	348.9	350.6	351.1	350.7	349.6	348.3	346.5	345.2
8.5°	340.4	342.9	345.3	348.3	350.1	350.6	350.3	349.1	347.7	345.8	344.3
9°	339.3	341.9	344.4	347.6	349.6	350.1	349.8	348.5	347.0	345.1	343.5
9.5°	338.2	340.9	343.5	346.8	349.1	349.5	349.2	347.8	346.3	344.2	342.5
10°	337.0	339.8	342.6	346.0	348.5	348.9	348.6	347.1	345.6	343.3	341.5
10.5°	335.8	338.6	341.6	345.3	347.8	348.3	348.0	346.4	344.9	342.4	340.5
11°	334.5	337.4	340.5	344.4	347.1	347.6	347.3	345.7	344.0	341.4	339.4
11.5°	333.1	336.2	339.4	343.4	346.4	346.9	346.6	344.9	343.2	340.3	338.2
12°	331.7	335.0	338.3	342.4	345.6	346.1	345.8	344.1	342.2	339.3	337.1
12.5°	330.3	333.7	337.1	341.3	344.9	345.4	345.1	343.2	341.2	338.2	336.0
13°	328.7	332.4	336.1	340.2	344.0	344.6	344.3	342.2	340.2	337.1	334.7
13.5°	327.2	331.0	334.7	339.1	343.1	343.6	343.4	341.2	339.1	336.0	333.5
14°	325.7	329.5	333.4	337.9	342.1	342.7	342.4	340.2	338.0	334.7	332.1
14.5°	324.0	328.0	332.0	336.7	341.0	341.7	341.4	339.1	336.8	333.4	330.7
15°	322.3	326.6	330.6	335.5	339.9	340.6	340.3	338.0	335.6	332.1	329.3
15.5°	320.6	325.0	329.1	334.1	338.7	339.5	339.2	336.8	334.4	330.7	327.8
16°	318.9	323.3	327.6	332.7	337.5	338.4	338.0	335.7	333.1	329.2	326.4
16.5°	317.2	321.6	326.1	331.3	336.2	337.2	336.8	334.4	331.7	327.8	324.9
17°	315.4	319.9	324.6	329.9	335.1	336.0	335.6	333.1	330.3	326.3	323.3
17.5°	313.5	318.2	322.9	328.3	333.7	334.6	334.3	331.7	328.9	324.8	321.7
18°	311.6	316.5	321.2	326.9	332.3	333.2	333.0	330.3	327.4	323.1	320.0
18.5°	309.6	314.7	319.5	325.3	330.9	331.8	331.5	328.8	325.9	321.5	318.2
19°	307.8	312.8	317.8	323.7	329.4	330.4	330.1	327.3	324.4	319.8	316.5
19.5°	305.8	311.0	316.1	321.9	327.8	328.9	328.5	325.9	322.7	318.1	314.7
20°	303.8	309.0	314.2	320.2	326.3	327.3	327.0	324.3	321.1	316.5	312.8
20.5°	301.8	307.2	312.4	318.4	324.7	325.8	325.6	322.7	319.4	314.7	311.0
21°	299.7	305.3	310.5	316.8	323.0	324.1	324.0	321.0	317.8	312.8	309.1
21.5°	297.6	303.3	308.6	314.9	321.3	322.4	322.3	319.4	316.1	311.0	307.3
22°	295.5	301.2	306.7	313.0	319.5	320.6	320.6	317.8	314.4	309.2	305.3



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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°	293.3	299.3	304.7	311.2	317.8	318.8	318.8	316.1	312.5	307.4	303.3
23°	291.2	297.2	302.7	309.2	315.9	317.1	317.2	314.3	310.7	305.5	301.1
23.5°	289.1	295.0	300.7	307.2	313.9	315.2	315.4	312.5	308.8	303.5	299.1
24°	286.8	292.9	298.6	305.2	312.0	313.2	313.6	310.7	307.0	301.4	297.0
24.5°	284.5	290.7	296.5	303.0	310.0	311.2	311.7	308.7	305.1	299.3	294.8
25°	282.1	288.5	294.3	300.8	307.9	309.1	309.7	306.8	303.1	297.2	292.5
25.5°	279.8	286.1	292.0	298.7	305.7	307.1	307.8	304.8	301.0	295.0	290.2
26°	277.3	283.7	289.8	296.4	303.4	304.9	305.7	302.8	299.0	292.8	287.8
26.5°	274.9	281.3	287.5	294.0	301.1	302.6	303.5	300.7	296.9	290.6	285.3
27°	272.4	279.0	285.2	291.6	298.9	300.3	301.3	298.7	294.7	288.4	282.9
27.5°	269.9	276.5	282.7	289.3	296.5	298.1	299.2	296.5	292.5	286.0	280.5
28°	267.3	274.0	280.3	286.8	294.0	295.6	296.9	294.3	290.2	283.6	277.9
28.5°	264.6	271.5	277.8	284.2	291.5	293.0	294.5	292.0	288.0	281.1	275.4
29°	262.1	268.9	275.1	281.6	289.0	290.4	292.1	289.8	285.6	278.8	272.6
29.5°	259.2	266.2	272.5	279.0	286.2	287.8	289.7	287.4	283.1	276.3	269.9
30°	256.4	263.5	269.9	276.2	283.5	285.1	287.2	284.9	280.8	273.6	267.1
30.5°	253.6	260.8	267.1	273.3	280.8	282.3	284.6	282.4	278.2	271.1	264.3
31°	250.8	258.0	264.2	270.5	277.9	279.5	281.9	280.0	275.7	268.4	261.5
31.5°	247.7	255.1	261.5	267.6	275.0	276.5	279.3	277.3	273.0	265.5	258.5
32°	244.7	252.3	258.5	264.4	271.9	273.4	276.4	274.6	270.4	262.7	255.5
32.5°	241.7	249.2	255.5	261.4	268.8	270.3	273.5	271.7	267.6	259.9	252.4
33°	238.5	246.1	252.4	258.0	265.5	267.1	270.5	268.9	264.7	256.8	249.1
33.5°	235.1	242.9	249.2	254.7	262.1	263.8	267.4	266.0	261.9	253.8	245.8
34°	232.0	239.6	245.9	251.3	258.6	260.5	264.2	262.9	258.8	250.8	242.5
34.5°	228.6	236.2	242.6	247.7	255.1	256.9	261.1	259.9	255.7	247.6	239.1
35°	225.1	232.8	239.1	244.1	251.6	253.3	257.7	256.6	252.7	244.2	235.6
35.5°	221.4	229.2	235.4	240.4	247.8	249.4	254.3	253.4	249.4	241.0	232.0
36°	217.5	225.6	231.8	236.5	244.0	245.5	250.8	250.1	246.0	237.5	228.3
36.5°	213.7	221.7	227.9	232.7	240.0	241.7	247.1	246.6	242.6	234.1	224.6
37°	209.7	217.7	224.0	228.5	235.9	237.6	243.4	243.1	239.0	230.4	220.7
37.5°	205.8	213.8	220.0	224.4	231.8	233.5	239.6	239.4	235.3	226.6	216.8
38°	201.5	209.6	215.9	220.1	227.6	229.2	235.7	235.7	231.6	222.9	212.9
38.5°	197.2	205.5	211.5	215.7	223.3	225.0	231.9	231.8	227.8	218.8	208.8
39°	192.8	201.1	207.2	211.3	218.8	220.4	227.7	227.8	224.0	214.8	204.9
39.5°	188.3	196.7	202.7	206.8	214.3	215.8	223.6	223.8	220.0	210.7	200.5
40°	183.6	192.2	198.1	202.1	209.5	211.1	219.2	219.7	215.9	206.6	196.3
40.5°	179.1	187.5	193.6	197.4	204.9	206.4	214.8	215.4	211.6	202.2	191.9
41°	174.4	182.7	188.8	192.5	199.9	201.6	210.2	211.0	207.3	197.9	187.5
41.5°	169.8	178.1	184.1	187.6	195.2	196.8	205.7	206.7	202.9	193.6	183.0
42°	165.0	173.3	179.3	182.7	190.3	191.7	201.0	202.1	198.4	189.0	178.7
42.5°	160.3	168.6	174.4	177.9	185.3	186.7	196.2	197.4	193.9	184.4	174.1
43°	155.6	163.7	169.6	172.9	180.2	181.5	191.3	192.6	189.3	179.8	169.6
43.5°	150.9	159.0	164.7	168.0	175.2	176.4	186.4	187.9	184.6	175.1	165.0
44°	146.2	154.2	159.8	162.9	170.1	171.2	181.3	183.0	179.8	170.4	160.4
44.5°	141.7	149.5	154.9	157.9	165.0	166.1	176.3	178.2	175.0	165.9	155.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	137.2	144.7	150.3	153.0	159.9	161.1	171.1	173.3	170.2	161.2	151.5
45.5°	132.8	140.2	145.5	148.2	154.9	155.9	166.2	168.4	165.5	156.5	146.9
46°	128.4	135.7	140.8	143.4	150.0	150.8	161.1	163.3	160.8	151.8	142.6
46.5°	124.2	131.2	136.2	138.7	145.0	145.6	156.0	158.4	155.9	147.0	138.2
47°	119.9	126.8	131.6	133.9	140.1	140.7	150.9	153.5	151.2	142.5	133.7
47.5°	115.7	122.5	127.0	129.4	135.3	135.8	145.9	148.7	146.5	137.9	129.5
48°	111.9	118.2	122.8	124.7	130.6	131.0	141.0	143.8	141.8	133.5	125.3
48.5°	107.9	114.3	118.5	120.4	125.9	126.2	136.1	139.2	137.1	129.1	121.3
49°	104.1	110.3	114.5	116.0	121.4	121.6	131.3	134.5	132.6	124.7	117.1
49.5°	100.6	106.3	110.4	111.9	116.9	117.1	126.5	129.8	128.1	120.4	113.3
50°	96.9	102.7	106.4	107.7	112.6	112.7	121.9	125.1	123.7	116.1	109.4
50.5°	93.4	99.0	102.5	103.8	108.2	108.4	117.3	120.6	119.3	112.1	105.6
51°	90.0	95.5	98.7	99.9	104.2	104.2	112.9	116.2	115.0	108.1	101.9
51.5°	86.9	91.9	95.1	96.1	100.2	100.2	108.6	112.0	110.9	104.3	98.2
52°	83.8	88.5	91.6	92.4	96.4	96.4	104.3	107.7	106.7	100.5	94.8
52.5°	80.7	85.3	88.2	88.9	92.6	92.6	100.2	103.7	102.9	96.8	91.3
53°	77.7	82.1	84.9	85.6	89.1	88.9	96.4	99.7	99.1	93.2	88.0
53.5°	74.9	79.0	81.8	82.2	85.7	85.5	92.5	95.9	95.4	89.7	84.9
54°	72.1	76.2	78.5	79.0	82.3	82.1	88.8	92.0	91.7	86.4	81.8
54.5°	69.4	73.3	75.6	76.0	79.1	78.8	85.3	88.3	88.1	83.0	78.6
55°	66.9	70.5	72.7	73.0	76.0	75.7	81.8	84.9	84.7	79.9	75.8
55.5°	64.5	67.9	70.0	70.1	73.0	72.7	78.4	81.5	81.4	76.8	72.9
56°	62.0	65.3	67.2	67.5	70.2	70.0	75.3	78.2	78.2	73.9	70.2
56.5°	59.8	62.8	64.6	64.8	67.8	67.2	72.3	75.0	75.2	71.0	67.8
57°	57.5	60.4	62.1	62.3	65.0	64.5	69.4	71.9	72.2	68.5	65.1
57.5°	55.3	58.3	59.7	59.9	62.5	61.9	66.6	69.0	69.3	65.6	62.6
58°	53.2	56.0	57.4	57.7	60.0	59.6	63.8	66.2	66.5	63.0	60.1
58.5°	51.2	53.9	55.1	55.4	57.8	57.4	61.2	63.4	63.7	60.5	57.8
59°	49.5	51.8	53.0	53.1	55.7	55.1	58.8	60.8	61.1	58.2	55.7
59.5°	47.6	49.8	51.0	50.9	53.5	53.0	56.3	58.3	58.6	55.9	53.5
60°	45.8	47.9	49.0	49.1	51.4	51.0	54.1	55.9	56.2	53.6	51.3
60.5°	44.1	46.1	47.0	47.2	49.5	49.0	52.0	53.3	53.9	51.3	49.4
61°	42.4	44.3	45.1	45.4	47.6	47.1	49.8	51.2	51.6	49.4	47.4
61.5°	40.7	42.6	43.3	43.7	45.8	45.3	47.7	49.0	49.4	47.3	45.6
62°	39.1	40.9	41.7	41.9	44.1	43.5	45.8	46.9	47.3	45.3	43.8
62.5°	37.7	39.3	40.1	40.3	42.3	42.0	43.9	44.9	45.4	43.5	42.1
63°	36.4	37.7	38.5	38.7	40.8	40.4	42.1	43.1	43.5	41.8	40.4
63.5°	34.9	36.4	37.0	37.2	39.3	38.9	40.4	41.2	41.7	40.2	38.8
64°	33.6	35.0	35.4	35.7	37.9	37.3	38.8	39.4	39.9	38.5	37.4
64.5°	32.3	33.5	33.9	34.3	36.5	35.8	37.2	37.7	38.2	36.9	35.9
65°	31.2	32.2	32.6	33.1	35.0	34.4	35.7	36.1	36.7	35.3	34.5
65.5°	30.1	31.0	31.3	31.8	33.7	33.2	34.2	34.5	35.0	33.7	33.2
66°	28.9	29.9	30.1	30.6	32.5	32.0	32.9	33.1	33.4	32.4	31.9
66.5°	28.0	28.8	29.1	29.4	31.3	30.8	31.6	31.8	32.0	31.1	30.7
67°	26.7	27.6	28.1	28.2	30.1	29.7	30.3	30.4	30.7	30.0	29.7





TEST NUMBER: P522096

CATALOG NUMBER: RLLV4069BLE40AWHDM-4000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	25.8	26.5	26.6	27.2	29.1	28.5	29.1	29.3	29.3	28.6	28.3
68°	24.9	25.6	25.7	26.1	28.1	27.4	28.1	28.0	28.2	27.4	27.4
68.5°	23.9	24.6	24.7	25.0	26.8	26.4	26.7	26.7	26.8	26.2	26.3
69°	23.1	23.5	23.6	24.1	25.9	25.3	25.9	25.7	25.8	25.1	25.2
69.5°	22.3	22.9	22.8	23.1	24.8	24.6	24.7	24.7	24.7	24.3	24.4
70°	21.5	21.9	21.8	22.4	24.0	23.4	23.7	23.5	23.5	23.2	23.3
70.5°	20.6	21.2	21.1	21.4	23.1	22.8	23.0	22.7	22.7	22.3	22.5
71°	19.7	20.2	20.2	20.7	22.4	21.9	22.0	21.6	21.6	21.4	21.7
71.5°	19.0	19.5	19.6	19.9	21.6	21.2	21.2	20.9	20.8	20.6	21.1
72°	18.3	18.7	18.7	19.4	21.0	20.3	20.2	19.9	19.8	19.7	20.1
72.5°	17.8	17.9	17.9	18.5	20.2	19.6	19.5	19.3	19.2	18.9	19.5
73°	16.9	17.3	17.2	17.8	19.5	18.9	18.6	18.5	18.3	18.1	18.7
73.5°	16.3	16.6	16.6	17.0	18.8	18.1	17.9	17.8	17.7	17.5	17.9
74°	15.9	16.0	16.1	16.5	18.0	17.5	17.1	17.0	16.9	16.8	17.2
74.5°	15.4	15.4	15.4	16.0	17.7	16.9	16.5	16.3	16.1	16.2	16.7
75°	14.5	15.1	14.8	15.4	16.9	16.2	16.0	15.9	15.8	15.5	16.0
75.5°	13.9	14.3	14.4	14.7	16.1	15.6	15.2	15.2	15.2	15.0	15.4
76°	13.6	13.8	14.0	14.3	15.8	15.1	14.5	14.5	14.4	14.5	15.1
76.5°	12.8	13.3	13.3	13.9	15.1	14.5	14.2	14.1	13.9	14.1	14.3
77°	12.2	12.6	12.6	13.1	14.4	14.0	13.7	13.7	13.5	13.4	14.0
77.5°	11.6	12.1	12.2	12.5	13.9	13.4	12.9	13.0	12.8	12.7	13.2
78°	11.0	11.6	11.5	12.0	13.4	12.7	12.5	12.6	12.4	12.2	12.5
78.5°	10.6	10.9	11.0	11.2	12.6	12.2	12.1	12.1	11.9	11.6	12.1
79°	9.6	10.3	10.3	10.9	12.1	11.5	11.5	11.3	11.2	11.1	11.2
79.5°	9.2	9.6	9.5	10.1	11.5	11.0	10.9	11.0	10.8	10.5	10.8
80°	8.5	9.2	9.2	9.3	10.9	10.5	10.3	10.4	10.1	9.7	10.0
80.5°	7.7	8.5	8.4	8.9	10.3	9.8	9.7	9.6	9.4	9.3	9.2
81°	7.4	7.6	7.6	8.2	9.4	9.2	9.2	9.2	9.1	8.6	8.6
81.5°	6.6	7.3	7.4	7.4	9.1	8.7	8.6	8.6	8.3	7.8	8.0
82°	5.9	6.4	6.6	6.8	8.2	7.9	8.1	7.8	7.5	7.4	7.5
82.5°	5.5	5.8	5.9	6.2	7.5	7.5	7.4	7.5	7.2	6.6	6.7
83°	4.8	5.5	5.5	5.6	7.0	6.7	6.7	6.7	6.4	5.9	5.8
83.5°	4.2	4.7	4.8	5.0	6.2	6.0	6.1	5.9	5.7	5.6	5.6
84°	4.0	4.1	4.2	4.6	5.7	5.7	5.7	5.6	5.4	4.8	4.8
84.5°	3.2	3.8	4.0	4.0	5.0	5.0	5.0	4.9	4.7	4.2	4.1
85°	2.5	3.0	3.2	3.3	4.6	4.5	4.6	4.3	4.1	4.0	3.8
85.5°	2.3	2.3	2.5	2.9	4.0	4.0	4.0	4.0	3.8	3.2	3.0
86°	1.8	2.2	2.3	2.3	3.4	3.3	3.3	3.2	3.0	2.5	2.4
86.5°	1.6	1.5	1.7	2.1	2.9	2.9	2.8	2.5	2.4	2.3	2.2
87°	0.6	0.8	1.4	1.3	2.3	2.3	2.3	2.3	2.2	1.8	1.4
87.5°	0.5	0.5	0.6	0.7	2.1	2.1	2.0	1.7	1.5	1.6	0.9
88°	0.0	0.0	0.5	0.5	1.4	1.4	1.4	1.6	0.9	0.6	0.5
88.5°	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.6	0.5	0.5	0.0
89°	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.3	0.0	0.3
89.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P522096

CATALOG NUMBER: RLLV4069BLE40AWHDM-4000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P522096

CATALOG NUMBER: RLLV4069BLE40AWHDM-4000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	351.9	351.9	351.9	351.9	351.9	351.9
0.5°	352.7	351.3	351.3	351.2	351.3	351.5
1°	352.5	351.0	350.9	350.8	350.9	351.2
1.5°	352.2	350.5	350.4	350.3	350.5	350.8
2°	351.8	350.0	349.8	349.8	350.0	350.4
2.5°	351.5	349.5	349.3	349.2	349.5	349.9
3°	351.0	348.9	348.7	348.5	348.9	349.4
3.5°	350.5	348.2	348.0	347.8	348.2	348.8
4°	350.0	347.5	347.2	347.1	347.5	348.2
4.5°	349.4	346.7	346.5	346.2	346.8	347.5
5°	348.8	345.9	345.6	345.4	346.0	346.8
5.5°	348.1	345.1	344.8	344.6	345.2	346.1
6°	347.3	344.2	343.9	343.6	344.3	345.4
6.5°	346.6	343.2	342.9	342.6	343.4	344.5
7°	345.7	342.2	341.9	341.5	342.4	343.5
7.5°	345.0	341.1	340.7	340.4	341.2	342.5
8°	344.1	340.0	339.6	339.3	340.1	341.5
8.5°	343.1	338.9	338.4	338.1	338.9	340.4
9°	342.1	337.8	337.1	336.9	337.7	339.3
9.5°	341.0	336.6	336.0	335.7	336.5	338.2
10°	339.9	335.4	334.7	334.4	335.3	337.0
10.5°	338.8	334.1	333.3	332.9	334.0	335.8
11°	337.6	332.8	331.9	331.5	332.6	334.5
11.5°	336.4	331.4	330.5	330.0	331.3	333.1
12°	335.3	329.9	329.0	328.5	329.8	331.7
12.5°	333.9	328.5	327.5	327.0	328.2	330.3
13°	332.6	327.0	326.1	325.4	326.8	328.7
13.5°	331.2	325.5	324.5	323.8	325.3	327.2
14°	329.7	323.9	322.8	322.0	323.6	325.7
14.5°	328.2	322.3	321.1	320.3	321.9	324.0
15°	326.7	320.6	319.4	318.5	320.2	322.3
15.5°	325.2	318.8	317.7	316.8	318.4	320.6
16°	323.6	317.2	315.9	315.0	316.6	318.9
16.5°	321.9	315.4	314.0	313.1	314.8	317.2
17°	320.2	313.5	312.1	311.1	312.9	315.4
17.5°	318.4	311.6	310.3	309.2	311.0	313.5
18°	316.7	309.7	308.4	307.3	309.1	311.6
18.5°	314.9	307.8	306.4	305.2	307.2	309.6
19°	313.0	305.9	304.4	303.2	305.2	307.8
19.5°	311.2	303.9	302.3	301.1	303.1	305.8
20°	309.2	301.9	300.2	299.1	301.0	303.8
20.5°	307.4	299.8	298.3	297.0	299.1	301.8
21°	305.3	297.8	296.2	294.9	297.0	299.7
21.5°	303.3	295.6	294.0	292.7	294.8	297.6
22°	301.2	293.5	291.8	290.4	292.7	295.5



TEST NUMBER: P522096

CATALOG NUMBER: RLLV4069BLE40AWHDM-4000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	299.1	291.3	289.7	288.3	290.4	293.3
23°	297.1	289.2	287.3	286.1	288.2	291.2
23.5°	294.8	286.9	285.0	283.7	285.9	289.1
24°	292.6	284.5	282.7	281.3	283.6	286.8
24.5°	290.3	282.1	280.4	279.0	281.2	284.5
25°	288.0	279.8	278.0	276.5	278.9	282.1
25.5°	285.5	277.2	275.6	274.0	276.4	279.8
26°	283.1	274.7	273.0	271.5	273.9	277.3
26.5°	280.8	272.1	270.5	269.0	271.5	274.9
27°	278.2	269.7	267.9	266.4	268.9	272.4
27.5°	275.6	267.0	265.3	263.8	266.3	269.9
28°	272.9	264.2	262.7	261.1	263.7	267.3
28.5°	270.3	261.5	260.0	258.3	261.1	264.6
29°	267.5	258.7	257.2	255.5	258.3	262.1
29.5°	264.6	255.7	254.4	252.8	255.5	259.2
30°	261.9	252.9	251.7	249.9	252.7	256.4
30.5°	258.8	249.9	248.7	247.0	249.8	253.6
31°	255.8	246.7	245.8	244.1	246.9	250.8
31.5°	252.8	243.7	242.8	241.0	244.0	247.7
32°	249.6	240.4	239.7	238.0	241.0	244.7
32.5°	246.3	237.1	236.5	234.9	237.8	241.7
33°	243.0	233.7	233.3	231.6	234.7	238.5
33.5°	239.6	230.2	229.9	228.3	231.4	235.1
34°	236.1	226.6	226.4	225.1	228.0	232.0
34.5°	232.5	222.9	223.0	221.6	224.7	228.6
35°	228.8	219.0	219.4	218.0	221.2	225.1
35.5°	225.1	215.2	215.7	214.4	217.5	221.4
36°	221.1	211.1	211.9	210.5	213.9	217.5
36.5°	217.1	207.1	208.0	206.6	210.0	213.7
37°	213.1	202.8	204.0	202.7	206.1	209.7
37.5°	209.0	198.5	199.8	198.6	201.9	205.8
38°	204.9	194.2	195.7	194.4	197.8	201.5
38.5°	200.5	189.7	191.5	190.0	193.4	197.2
39°	196.2	185.2	187.2	185.6	189.1	192.8
39.5°	191.9	180.6	182.6	181.0	184.7	188.3
40°	187.5	176.0	178.1	176.5	180.1	183.6
40.5°	183.0	171.4	173.4	171.9	175.5	179.1
41°	178.6	166.9	168.7	167.5	170.8	174.4
41.5°	174.0	162.2	164.0	162.8	166.2	169.8
42°	169.4	157.7	159.5	158.3	161.6	165.0
42.5°	164.7	152.9	154.8	153.6	157.1	160.3
43°	160.2	148.3	150.2	149.0	152.5	155.6
43.5°	155.6	143.7	145.6	144.4	147.9	150.9
44°	151.1	139.3	141.0	140.0	143.2	146.2
44.5°	146.6	134.8	136.5	135.4	138.8	141.7



TEST NUMBER: P522096

CATALOG NUMBER: RLLV4069BLE40AWHDM-4000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	142.2	130.6	132.0	131.1	134.2	137.2
45.5°	137.8	126.2	127.7	126.7	129.9	132.8
46°	133.4	122.2	123.5	122.6	125.5	128.4
46.5°	129.0	117.9	119.4	118.3	121.4	124.2
47°	124.7	113.9	115.2	114.3	117.2	119.9
47.5°	120.8	110.1	111.4	110.3	113.2	115.7
48°	116.7	106.2	107.5	106.5	109.3	111.9
48.5°	112.8	102.7	103.7	102.9	105.6	107.9
49°	109.0	99.1	100.1	99.3	101.9	104.1
49.5°	105.3	95.6	96.6	95.9	98.3	100.6
50°	101.6	92.2	93.2	92.5	95.0	96.9
50.5°	98.0	88.9	89.8	89.0	91.5	93.4
51°	94.6	85.8	86.7	85.9	88.1	90.0
51.5°	91.2	82.7	83.5	82.8	85.0	86.9
52°	88.0	79.7	80.3	79.8	81.8	83.8
52.5°	84.9	76.9	77.6	77.0	78.8	80.7
53°	81.7	74.1	74.7	74.2	76.1	77.7
53.5°	78.7	71.4	72.0	71.5	73.3	74.9
54°	75.8	68.9	69.4	68.9	70.6	72.1
54.5°	73.1	66.3	66.9	66.5	68.1	69.4
55°	70.4	63.8	64.4	64.0	65.5	66.9
55.5°	68.0	61.6	61.9	61.6	63.0	64.5
56°	65.3	59.4	59.8	59.5	60.8	62.0
56.5°	62.9	57.3	57.7	57.3	58.6	59.8
57°	60.6	55.1	55.7	55.1	56.6	57.5
57.5°	58.4	53.1	53.7	53.1	54.3	55.3
58°	56.3	51.1	51.6	51.1	52.4	53.2
58.5°	54.2	49.4	49.7	49.4	50.6	51.2
59°	52.1	47.6	47.9	47.7	48.6	49.5
59.5°	50.3	45.9	46.2	45.9	46.8	47.6
60°	48.3	44.2	44.6	44.2	45.1	45.8
60.5°	46.6	42.6	42.9	42.6	43.6	44.1
61°	44.8	41.1	41.5	41.1	42.0	42.4
61.5°	43.2	39.7	40.1	39.7	40.3	40.7
62°	41.5	38.3	38.6	38.3	38.8	39.1
62.5°	40.2	37.0	37.1	36.9	37.3	37.7
63°	38.7	35.5	35.9	35.4	36.0	36.4
63.5°	37.3	34.2	34.6	34.2	34.8	34.9
64°	35.7	33.1	33.4	33.0	33.4	33.6
64.5°	34.4	32.0	32.2	32.0	32.2	32.3
65°	33.1	30.9	31.3	30.9	31.1	31.2
65.5°	32.0	30.0	30.1	29.8	30.0	30.1
66°	30.9	28.8	29.1	28.7	29.0	28.9
66.5°	30.0	28.1	28.2	27.9	28.0	28.0
67°	28.7	26.8	27.1	26.7	26.8	26.7



TEST NUMBER: P522096

CATALOG NUMBER: RLLV4069BLE40AWHDM-4000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	27.8	26.1	26.2	26.0	26.0	25.8
68°	26.6	25.0	25.3	24.9	24.9	24.9
68.5°	25.9	24.3	24.6	24.1	24.1	23.9
69°	24.9	23.3	23.6	23.2	23.1	23.1
69.5°	24.0	22.8	23.0	22.6	22.5	22.3
70°	23.2	21.9	22.2	21.7	21.7	21.5
70.5°	22.6	21.4	21.4	21.2	21.1	20.6
71°	21.6	20.5	20.6	20.3	20.2	19.7
71.5°	20.9	19.8	19.9	19.7	19.5	19.0
72°	20.1	19.1	19.5	18.9	18.8	18.3
72.5°	19.6	18.6	18.7	18.1	18.0	17.8
73°	18.8	17.9	17.9	17.7	17.6	16.9
73.5°	18.1	17.2	17.3	17.0	16.8	16.3
74°	17.8	16.8	16.7	16.3	16.1	15.9
74.5°	16.9	16.2	16.0	15.8	15.7	15.4
75°	16.3	15.6	15.5	15.3	15.1	14.5
75.5°	16.0	15.1	15.2	14.5	14.4	13.9
76°	15.3	14.4	14.4	14.0	13.8	13.6
76.5°	14.5	13.8	13.8	13.5	13.3	12.8
77°	13.9	13.0	13.0	12.7	12.5	12.2
77.5°	13.5	12.3	12.4	12.1	12.0	11.6
78°	12.7	11.7	11.8	11.3	11.3	11.0
78.5°	12.2	11.0	11.0	10.9	10.8	10.6
79°	11.3	10.3	10.3	10.0	9.9	9.6
79.5°	10.8	9.4	9.6	9.3	9.2	9.2
80°	10.0	9.0	9.1	8.7	8.6	8.5
80.5°	9.3	8.3	8.3	7.8	8.0	7.7
81°	8.8	7.5	7.4	7.5	7.4	7.4
81.5°	7.8	7.0	6.8	6.6	6.7	6.6
82°	7.5	6.0	6.1	5.8	5.8	5.9
82.5°	6.6	5.7	5.6	5.1	5.5	5.5
83°	5.8	4.8	4.8	4.6	4.7	4.8
83.5°	5.3	4.1	4.1	4.0	4.1	4.2
84°	4.7	3.8	3.8	3.3	3.8	4.0
84.5°	4.1	3.0	3.0	2.8	3.0	3.2
85°	3.4	2.4	2.3	2.3	2.3	2.5
85.5°	2.9	2.1	2.1	1.7	2.2	2.3
86°	2.3	1.4	1.4	1.4	1.5	1.8
86.5°	1.7	0.9	0.8	0.7	1.0	1.6
87°	1.3	0.6	0.5	0.5	0.5	0.6
87.5°	0.7	0.0	0.0	0.0	0.3	0.5
88°	0.5	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0
89°	0.3	0.0	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P522096

CATALOG NUMBER: RLLV4069BLE40AWHDM-4000K-UNIT

**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

(END OF REPORT)