

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: P522097

Luminaire Tested: **RLLV4069BLE40AWHDM-5000K-UNIT**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522097  
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-5000K-UNIT  
Description: Surface Mount Downlight Fixture, Single Unit  
Light Source: (16) 5000K CCT, 92 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

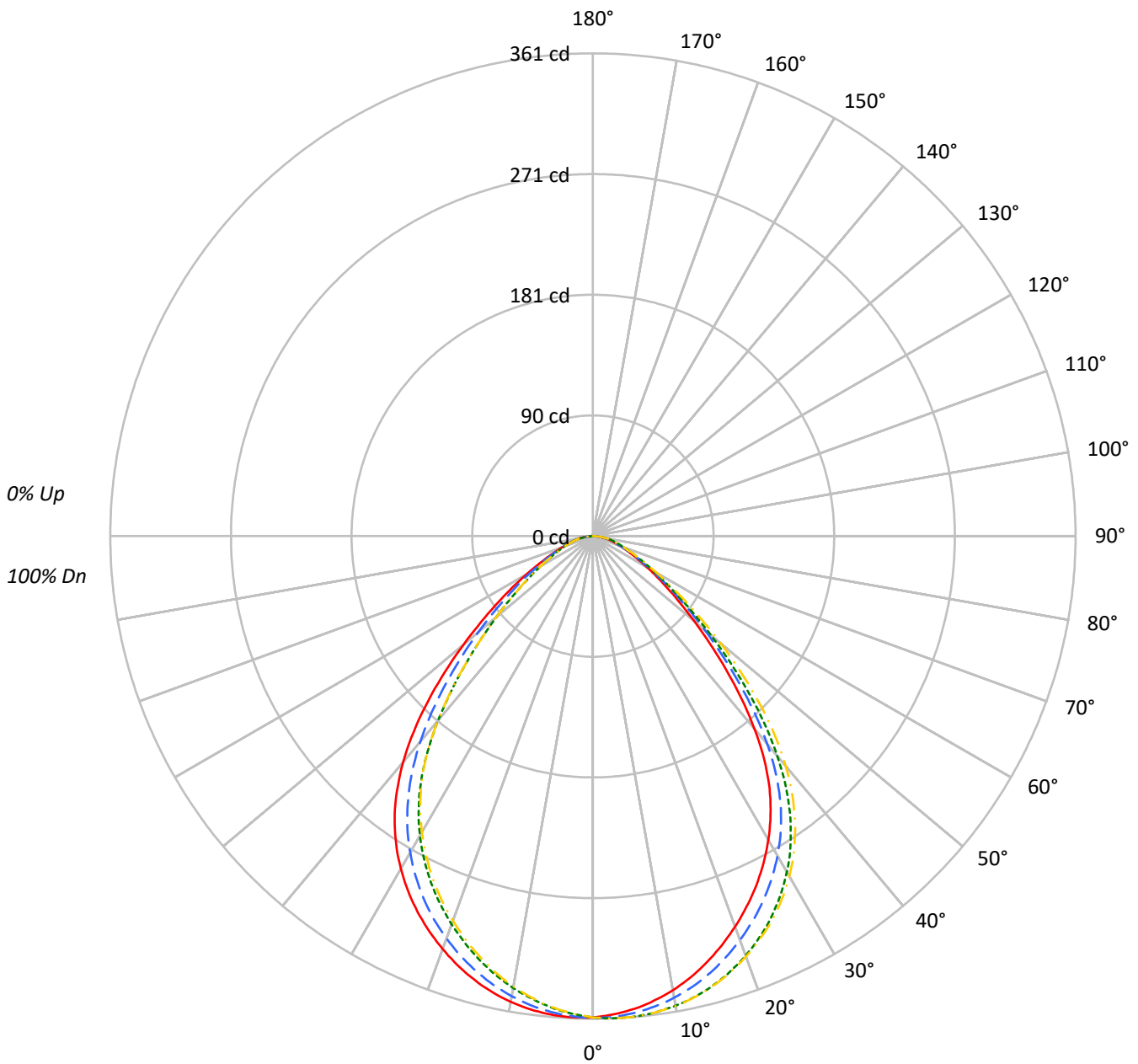
Lumens per Lamp: 644.87 (16 lamps)  
Luminaire Lumens: 660.0 lumens  
Efficiency: 6.4%  
Efficacy: 106.5 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.19  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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: P522097  
CATALOG NUMBER: RLLV4069BLE40AWHDM-5000K-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				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	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6
1	7	7	7	6	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6
2	7	6	6	6	6	6	6	5	6	6	5	6	5	5	5	5	5	5	5	5	5
3	6	6	5	5	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
4	6	5	5	4	6	5	5	4	5	4	4	5	4	4	5	4	4	5	4	4	4
5	5	5	4	4	5	5	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	4	3	4	4	3	4	3	3	3
7	5	4	3	3	4	4	3	3	4	3	3	4	3	3	4	3	3	4	3	3	3
8	4	4	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
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	3	2	3	3	2	3	3	2	3	2	2	2

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

	0°	90°	180°	270°
0°	44506	44506	44506	44506
5°	44031	44750	44564	43919
10°	43285	44753	44389	43071
15°	42199	44502	43939	41981
20°	40891	43903	43219	40628
25°	39370	42956	42302	39042
30°	37448	41401	41001	36920
35°	34747	38836	39002	33812
40°	30315	34591	35640	29057
45°	24540	28595	30430	23351
50°	19074	22150	24323	18132
55°	14739	16743	18682	14071
60°	11593	13002	14213	11173
65°	9329	10470	10996	9241
70°	7950	8889	8709	8094
75°	7115	8261	7736	7640
80°	6192	7900	7331	6548
85°	3545	6807	5956	3403



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	33.9	5.1	0.3
10°-20°	95.0	14.4	0.9
20°-30°	137.9	20.9	1.3
30°-40°	150.7	22.8	1.5
40°-50°	118.5	18.0	1.1
50°-60°	68.2	10.3	0.7
60°-70°	34.7	5.3	0.3
70°-80°	17.0	2.6	0.2
80°-90°	4.2	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°	266.8	40.4	2.6
0°-40°	417.4	63.2	4.0
0°-60°	604.1	91.5	5.9
0°-90°	660.0	100.0	6.4
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°	660.0	100.0	6.4

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	360	360	360	360	360	
5°	355	361	359	354	355	34
15°	330	348	343	328	330	93
25°	289	315	310	286	289	133
35°	230	257	258	224	230	143
45°	140	164	174	134	140	109
55°	68	78	87	65	68	62
65°	32	36	38	32	32	32
75°	15	17	16	16	15	16
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°	360.1	360.1	360.1	360.1	360.1	360.1	360.1	360.1	360.1	360.1	360.1
0.5°	359.7	359.8	360.3	361.3	360.2	360.2	360.2	360.1	360.1	360.0	360.2
1°	359.4	359.7	360.3	361.3	360.5	360.5	360.4	360.3	360.2	360.0	360.1
1.5°	358.9	359.5	360.2	361.3	360.7	360.7	360.7	360.4	360.2	360.0	359.9
2°	358.5	359.2	360.1	361.3	360.9	360.9	360.9	360.5	360.3	360.0	359.7
2.5°	358.0	358.8	359.9	361.2	361.0	361.0	361.0	360.6	360.2	359.8	359.4
3°	357.5	358.4	359.6	361.1	361.0	361.1	361.0	360.6	360.1	359.5	359.1
3.5°	356.9	358.0	359.3	360.9	361.0	361.1	361.0	360.6	360.0	359.3	358.7
4°	356.3	357.5	358.8	360.7	361.0	361.1	361.0	360.5	359.8	358.9	358.3
4.5°	355.6	357.0	358.4	360.5	360.9	361.1	360.9	360.4	359.6	358.5	357.8
5°	354.9	356.4	357.9	360.1	360.7	361.0	360.7	360.2	359.2	358.1	357.3
5.5°	354.2	355.8	357.4	359.8	360.6	360.8	360.6	359.9	358.8	357.6	356.7
6°	353.4	355.1	356.8	359.3	360.3	360.6	360.4	359.6	358.5	357.1	356.1
6.5°	352.5	354.4	356.2	358.8	360.0	360.4	360.1	359.2	358.0	356.6	355.4
7°	351.5	353.6	355.5	358.2	359.7	360.0	359.7	358.7	357.6	355.9	354.8
7.5°	350.4	352.7	354.8	357.7	359.3	359.7	359.3	358.2	357.0	355.3	354.0
8°	349.4	351.9	354.1	357.0	358.7	359.3	358.8	357.7	356.4	354.6	353.2
8.5°	348.3	350.9	353.3	356.4	358.2	358.7	358.4	357.2	355.8	353.9	352.3
9°	347.2	349.8	352.4	355.7	357.7	358.2	357.9	356.6	355.1	353.1	351.5
9.5°	346.1	348.8	351.5	354.9	357.2	357.6	357.3	355.9	354.4	352.2	350.4
10°	344.9	347.7	350.5	354.1	356.6	357.0	356.7	355.2	353.7	351.3	349.4
10.5°	343.6	346.5	349.5	353.3	355.9	356.4	356.1	354.5	352.9	350.3	348.4
11°	342.2	345.3	348.4	352.4	355.2	355.7	355.4	353.8	352.0	349.3	347.3
11.5°	340.8	344.1	347.3	351.4	354.5	355.0	354.7	352.9	351.2	348.2	346.1
12°	339.4	342.8	346.2	350.3	353.7	354.2	353.9	352.1	350.1	347.2	345.0
12.5°	338.0	341.4	345.0	349.2	352.9	353.4	353.1	351.2	349.1	346.1	343.8
13°	336.4	340.1	343.9	348.1	352.0	352.6	352.3	350.1	348.1	345.0	342.4
13.5°	334.9	338.7	342.4	347.0	351.1	351.6	351.4	349.1	347.0	343.8	341.2
14°	333.2	337.2	341.1	345.8	350.0	350.6	350.3	348.1	345.9	342.4	339.8
14.5°	331.5	335.7	339.7	344.6	348.9	349.6	349.3	347.0	344.7	341.1	338.4
15°	329.8	334.1	338.3	343.3	347.8	348.5	348.2	345.9	343.4	339.8	337.0
15.5°	328.1	332.5	336.8	341.8	346.6	347.4	347.1	344.7	342.1	338.4	335.5
16°	326.4	330.8	335.3	340.4	345.4	346.3	345.9	343.5	340.8	336.9	333.9
16.5°	324.5	329.1	333.6	339.0	344.1	345.1	344.7	342.1	339.4	335.5	332.4
17°	322.7	327.4	332.1	337.6	342.9	343.8	343.4	340.8	338.0	333.8	330.8
17.5°	320.8	325.6	330.4	336.0	341.4	342.3	342.0	339.4	336.6	332.3	329.2
18°	318.9	323.8	328.7	334.5	340.0	340.9	340.7	338.0	335.1	330.6	327.5
18.5°	316.8	322.0	327.0	332.8	338.6	339.5	339.2	336.5	333.4	329.0	325.6
19°	314.9	320.1	325.1	331.2	337.1	338.1	337.8	335.0	331.9	327.3	323.8
19.5°	312.9	318.3	323.4	329.4	335.5	336.6	336.2	333.4	330.2	325.5	322.0
20°	310.9	316.2	321.5	327.7	333.8	335.0	334.7	331.8	328.6	323.8	320.1
20.5°	308.8	314.3	319.7	325.8	332.2	333.3	333.1	330.2	326.9	322.0	318.3
21°	306.7	312.4	317.8	324.1	330.5	331.6	331.5	328.5	325.2	320.1	316.3
21.5°	304.5	310.4	315.8	322.2	328.8	329.9	329.8	326.9	323.4	318.3	314.4
22°	302.4	308.2	313.8	320.3	327.0	328.1	328.1	325.1	321.7	316.4	312.4



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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°	300.1	306.2	311.8	318.5	325.1	326.3	326.3	323.4	319.8	314.5	310.4
23°	298.0	304.1	309.8	316.4	323.2	324.4	324.5	321.6	318.0	312.6	308.1
23.5°	295.8	301.9	307.7	314.3	321.2	322.5	322.7	319.8	316.0	310.6	306.0
24°	293.5	299.7	305.5	312.3	319.3	320.5	320.9	318.0	314.1	308.4	303.9
24.5°	291.1	297.5	303.4	310.1	317.2	318.5	319.0	315.9	312.2	306.2	301.7
25°	288.7	295.2	301.1	307.8	315.0	316.3	316.9	313.9	310.2	304.1	299.3
25.5°	286.3	292.7	298.8	305.6	312.8	314.2	314.9	311.9	308.0	301.9	296.9
26°	283.7	290.3	296.5	303.3	310.5	312.0	312.8	309.9	305.9	299.6	294.5
26.5°	281.3	287.9	294.2	300.8	308.1	309.7	310.6	307.7	303.8	297.4	291.9
27°	278.8	285.5	291.8	298.4	305.8	307.3	308.3	305.6	301.6	295.1	289.5
27.5°	276.1	282.9	289.3	296.0	303.4	305.0	306.1	303.4	299.3	292.6	287.0
28°	273.5	280.4	286.8	293.5	300.8	302.5	303.8	301.1	297.0	290.2	284.3
28.5°	270.8	277.8	284.2	290.8	298.3	299.8	301.4	298.8	294.7	287.7	281.8
29°	268.1	275.1	281.5	288.2	295.7	297.2	298.9	296.5	292.2	285.3	279.0
29.5°	265.2	272.4	278.9	285.5	292.8	294.5	296.4	294.1	289.7	282.7	276.1
30°	262.4	269.7	276.1	282.6	290.1	291.7	293.9	291.5	287.3	280.0	273.3
30.5°	259.5	266.8	273.3	279.7	287.3	288.9	291.2	289.0	284.6	277.4	270.5
31°	256.6	264.0	270.4	276.8	284.3	286.0	288.5	286.5	282.1	274.6	267.5
31.5°	253.5	261.1	267.5	273.8	281.4	282.9	285.8	283.7	279.4	271.7	264.5
32°	250.4	258.1	264.5	270.6	278.3	279.8	282.8	281.0	276.7	268.9	261.5
32.5°	247.3	255.0	261.5	267.4	275.0	276.6	279.9	278.1	273.8	265.9	258.2
33°	244.1	251.9	258.2	264.0	271.7	273.3	276.8	275.1	270.9	262.8	254.9
33.5°	240.6	248.5	255.0	260.7	268.1	270.0	273.6	272.2	267.9	259.7	251.5
34°	237.4	245.2	251.6	257.1	264.6	266.5	270.4	269.1	264.8	256.6	248.1
34.5°	233.9	241.7	248.2	253.5	261.1	262.9	267.1	265.9	261.7	253.4	244.7
35°	230.3	238.2	244.7	249.7	257.4	259.1	263.7	262.6	258.5	249.9	241.1
35.5°	226.5	234.5	240.9	246.0	253.6	255.2	260.3	259.3	255.2	246.6	237.4
36°	222.6	230.8	237.2	242.0	249.6	251.2	256.6	255.9	251.8	243.0	233.6
36.5°	218.6	226.8	233.2	238.1	245.6	247.3	252.9	252.4	248.2	239.5	229.8
37°	214.6	222.8	229.2	233.8	241.4	243.1	249.0	248.7	244.6	235.8	225.8
37.5°	210.6	218.8	225.1	229.6	237.2	238.9	245.2	245.0	240.8	231.9	221.9
38°	206.2	214.5	220.9	225.2	232.9	234.5	241.2	241.2	237.0	228.1	217.8
38.5°	201.7	210.2	216.4	220.7	228.5	230.2	237.3	237.2	233.1	223.9	213.7
39°	197.3	205.8	212.0	216.2	223.9	225.5	233.0	233.1	229.2	219.8	209.6
39.5°	192.6	201.2	207.4	211.6	219.3	220.8	228.8	229.0	225.1	215.6	205.2
40°	187.9	196.7	202.8	206.8	214.4	216.0	224.3	224.8	220.9	211.4	200.8
40.5°	183.2	191.8	198.1	201.9	209.6	211.2	219.8	220.4	216.5	206.9	196.4
41°	178.5	187.0	193.2	197.0	204.6	206.3	215.1	215.9	212.1	202.5	191.8
41.5°	173.7	182.2	188.4	191.9	199.7	201.3	210.5	211.5	207.6	198.1	187.3
42°	168.8	177.3	183.4	187.0	194.8	196.2	205.7	206.8	203.1	193.4	182.8
42.5°	164.0	172.5	178.5	182.0	189.6	191.0	200.7	201.9	198.4	188.7	178.2
43°	159.2	167.5	173.5	176.9	184.4	185.8	195.8	197.1	193.7	184.0	173.5
43.5°	154.4	162.7	168.5	171.9	179.3	180.5	190.7	192.2	188.9	179.2	168.8
44°	149.6	157.8	163.5	166.7	174.0	175.2	185.5	187.3	184.0	174.4	164.1
44.5°	145.0	153.0	158.5	161.6	168.8	170.0	180.4	182.3	179.1	169.8	159.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	140.4	148.1	153.8	156.6	163.6	164.8	175.1	177.3	174.1	165.0	155.0
45.5°	135.8	143.4	148.9	151.6	158.5	159.5	170.1	172.3	169.4	160.1	150.3
46°	131.4	138.9	144.0	146.8	153.5	154.3	164.8	167.1	164.5	155.3	145.9
46.5°	127.0	134.2	139.4	141.9	148.4	149.0	159.6	162.1	159.5	150.4	141.4
47°	122.7	129.8	134.6	137.1	143.3	143.9	154.4	157.1	154.7	145.8	136.9
47.5°	118.4	125.3	130.0	132.4	138.5	139.0	149.3	152.1	149.9	141.1	132.5
48°	114.5	121.0	125.6	127.6	133.6	134.0	144.2	147.2	145.1	136.6	128.3
48.5°	110.4	116.9	121.3	123.2	128.9	129.2	139.3	142.4	140.3	132.1	124.1
49°	106.5	112.9	117.1	118.7	124.2	124.4	134.3	137.7	135.6	127.6	119.9
49.5°	102.9	108.8	113.0	114.5	119.6	119.9	129.5	132.8	131.1	123.2	115.9
50°	99.2	105.1	108.9	110.2	115.2	115.3	124.7	128.1	126.5	118.8	112.0
50.5°	95.6	101.3	104.9	106.2	110.7	110.9	120.1	123.4	122.1	114.7	108.0
51°	92.1	97.7	101.0	102.2	106.6	106.6	115.5	118.9	117.6	110.6	104.3
51.5°	88.9	94.0	97.3	98.3	102.5	102.5	111.1	114.6	113.5	106.7	100.5
52°	85.7	90.6	93.7	94.5	98.6	98.6	106.7	110.2	109.2	102.8	97.0
52.5°	82.6	87.3	90.3	91.0	94.7	94.7	102.5	106.1	105.3	99.1	93.4
53°	79.5	84.0	86.9	87.6	91.2	91.0	98.6	102.0	101.4	95.4	90.1
53.5°	76.6	80.9	83.7	84.1	87.7	87.5	94.6	98.1	97.6	91.8	86.9
54°	73.8	77.9	80.4	80.9	84.2	84.0	90.9	94.1	93.8	88.4	83.7
54.5°	71.1	75.0	77.3	77.7	81.0	80.7	87.3	90.4	90.2	84.9	80.5
55°	68.4	72.2	74.4	74.7	77.7	77.4	83.7	86.9	86.7	81.8	77.5
55.5°	66.0	69.4	71.7	71.8	74.7	74.4	80.3	83.4	83.3	78.6	74.6
56°	63.5	66.8	68.7	69.0	71.9	71.7	77.0	80.0	80.0	75.6	71.9
56.5°	61.1	64.3	66.1	66.3	69.3	68.7	74.0	76.7	76.9	72.7	69.3
57°	58.8	61.8	63.6	63.8	66.5	66.0	71.1	73.6	73.9	70.0	66.6
57.5°	56.6	59.6	61.0	61.3	64.0	63.4	68.1	70.6	71.0	67.1	64.1
58°	54.5	57.3	58.7	59.0	61.4	60.9	65.3	67.7	68.0	64.5	61.5
58.5°	52.4	55.2	56.4	56.7	59.1	58.7	62.7	64.9	65.2	62.0	59.1
59°	50.6	53.0	54.3	54.4	57.0	56.4	60.1	62.3	62.6	59.5	57.0
59.5°	48.7	50.9	52.2	52.1	54.8	54.3	57.6	59.6	59.9	57.2	54.8
60°	46.9	49.0	50.1	50.2	52.6	52.2	55.4	57.2	57.5	54.9	52.5
60.5°	45.1	47.2	48.1	48.3	50.6	50.1	53.2	54.6	55.2	52.5	50.5
61°	43.4	45.3	46.2	46.5	48.7	48.2	50.9	52.4	52.8	50.5	48.5
61.5°	41.6	43.6	44.3	44.7	46.9	46.4	48.8	50.1	50.5	48.4	46.7
62°	40.0	41.8	42.7	42.9	45.1	44.5	46.9	48.0	48.4	46.4	44.8
62.5°	38.6	40.2	41.0	41.2	43.3	43.0	44.9	46.0	46.5	44.5	43.1
63°	37.3	38.6	39.4	39.6	41.7	41.3	43.1	44.1	44.5	42.8	41.3
63.5°	35.7	37.3	37.9	38.1	40.2	39.8	41.3	42.1	42.7	41.1	39.7
64°	34.4	35.8	36.2	36.5	38.8	38.2	39.7	40.3	40.8	39.4	38.3
64.5°	33.1	34.3	34.7	35.1	37.4	36.6	38.1	38.6	39.1	37.8	36.7
65°	31.9	33.0	33.4	33.9	35.8	35.2	36.5	36.9	37.6	36.1	35.3
65.5°	30.8	31.7	32.0	32.5	34.5	34.0	35.0	35.3	35.8	34.5	34.0
66°	29.6	30.6	30.8	31.3	33.3	32.7	33.7	33.9	34.2	33.2	32.6
66.5°	28.6	29.5	29.8	30.1	32.0	31.5	32.3	32.5	32.7	31.8	31.4
67°	27.3	28.2	28.7	28.8	30.8	30.4	31.0	31.1	31.4	30.7	30.4





TEST NUMBER: P522097

CATALOG NUMBER: RLLV4069BLE40AWHDM-5000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	26.4	27.1	27.2	27.8	29.8	29.2	29.8	30.0	30.0	29.3	29.0
68°	25.5	26.2	26.3	26.7	28.7	28.0	28.7	28.6	28.8	28.0	28.0
68.5°	24.5	25.2	25.3	25.6	27.4	27.0	27.3	27.3	27.4	26.8	26.9
69°	23.7	24.1	24.2	24.7	26.5	25.9	26.5	26.3	26.4	25.7	25.8
69.5°	22.8	23.4	23.3	23.7	25.4	25.2	25.3	25.3	25.3	24.9	25.0
70°	22.0	22.4	22.3	22.9	24.6	24.0	24.3	24.1	24.1	23.8	23.9
70.5°	21.1	21.7	21.6	21.9	23.7	23.3	23.5	23.2	23.2	22.8	23.0
71°	20.1	20.7	20.7	21.2	22.9	22.4	22.5	22.1	22.1	21.9	22.2
71.5°	19.4	19.9	20.0	20.3	22.1	21.7	21.7	21.4	21.3	21.1	21.6
72°	18.7	19.1	19.1	19.8	21.5	20.8	20.7	20.3	20.2	20.1	20.5
72.5°	18.2	18.3	18.3	18.9	20.7	20.0	19.9	19.7	19.6	19.3	19.9
73°	17.3	17.7	17.6	18.2	19.9	19.3	19.0	18.9	18.7	18.5	19.1
73.5°	16.7	17.0	17.0	17.4	19.2	18.5	18.3	18.2	18.1	17.9	18.3
74°	16.3	16.4	16.5	16.9	18.4	17.9	17.5	17.4	17.3	17.2	17.6
74.5°	15.8	15.8	15.8	16.4	18.1	17.3	16.9	16.7	16.5	16.6	17.1
75°	14.9	15.5	15.2	15.8	17.3	16.6	16.4	16.3	16.2	15.9	16.4
75.5°	14.3	14.7	14.8	15.1	16.5	16.0	15.6	15.6	15.6	15.4	15.8
76°	13.9	14.2	14.4	14.7	16.2	15.5	14.9	14.9	14.8	14.9	15.5
76.5°	13.1	13.6	13.6	14.3	15.5	14.9	14.6	14.5	14.3	14.5	14.7
77°	12.5	12.9	12.9	13.4	14.8	14.4	14.0	14.0	13.8	13.7	14.4
77.5°	11.8	12.3	12.5	12.8	14.3	13.7	13.2	13.3	13.1	13.0	13.5
78°	11.2	11.8	11.7	12.2	13.7	13.0	12.8	12.9	12.7	12.5	12.8
78.5°	10.8	11.1	11.2	11.4	12.9	12.5	12.3	12.3	12.1	11.8	12.3
79°	9.8	10.5	10.5	11.1	12.3	11.7	11.7	11.5	11.4	11.3	11.4
79.5°	9.4	9.8	9.7	10.3	11.7	11.2	11.1	11.2	11.0	10.7	11.0
80°	8.7	9.4	9.4	9.5	11.1	10.7	10.5	10.6	10.3	9.9	10.2
80.5°	7.9	8.7	8.6	9.1	10.5	10.0	9.9	9.8	9.6	9.5	9.4
81°	7.6	7.8	7.8	8.4	9.6	9.4	9.4	9.4	9.3	8.8	8.8
81.5°	6.8	7.5	7.6	7.6	9.3	8.9	8.8	8.8	8.5	8.0	8.2
82°	6.1	6.6	6.8	7.0	8.4	8.1	8.3	8.0	7.7	7.6	7.7
82.5°	5.7	6.0	6.1	6.4	7.7	7.7	7.6	7.7	7.4	6.8	6.9
83°	5.0	5.7	5.7	5.8	7.2	6.9	6.9	6.9	6.6	6.1	6.0
83.5°	4.3	4.9	5.0	5.2	6.4	6.2	6.3	6.1	5.9	5.8	5.8
84°	4.0	4.2	4.3	4.8	5.9	5.9	5.9	5.8	5.6	5.0	5.0
84.5°	3.2	3.8	4.0	4.0	5.2	5.2	5.2	5.1	4.9	4.3	4.2
85°	2.5	3.0	3.2	3.3	4.8	4.6	4.8	4.4	4.2	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: P522097

CATALOG NUMBER: RLLV4069BLE40AWHDM-5000K-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: P522097

CATALOG NUMBER: RLLV4069BLE40AWHDM-5000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	360.1	360.1	360.1	360.1	360.1	360.1
0.5°	360.9	359.5	359.5	359.4	359.5	359.7
1°	360.7	359.2	359.1	358.9	359.1	359.4
1.5°	360.4	358.6	358.5	358.4	358.6	358.9
2°	360.0	358.1	357.9	357.9	358.1	358.5
2.5°	359.7	357.6	357.4	357.3	357.6	358.0
3°	359.2	357.0	356.8	356.6	357.0	357.5
3.5°	358.6	356.3	356.1	355.9	356.3	356.9
4°	358.1	355.6	355.3	355.2	355.6	356.3
4.5°	357.5	354.8	354.6	354.3	354.9	355.6
5°	356.9	354.0	353.7	353.5	354.1	354.9
5.5°	356.2	353.1	352.8	352.6	353.2	354.2
6°	355.4	352.2	351.9	351.6	352.3	353.4
6.5°	354.7	351.2	350.9	350.5	351.4	352.5
7°	353.8	350.1	349.8	349.4	350.3	351.5
7.5°	353.0	349.0	348.6	348.3	349.1	350.4
8°	352.1	347.9	347.5	347.2	348.0	349.4
8.5°	351.1	346.8	346.3	346.0	346.8	348.3
9°	350.0	345.7	345.0	344.8	345.6	347.2
9.5°	348.9	344.5	343.8	343.5	344.4	346.1
10°	347.8	343.2	342.4	342.1	343.1	344.9
10.5°	346.7	341.8	341.0	340.6	341.7	343.6
11°	345.5	340.5	339.6	339.2	340.3	342.2
11.5°	344.3	339.1	338.2	337.7	339.0	340.8
12°	343.1	337.6	336.7	336.2	337.5	339.4
12.5°	341.6	336.2	335.2	334.7	335.9	338.0
13°	340.3	334.7	333.6	332.9	334.4	336.4
13.5°	338.9	333.0	332.0	331.3	332.8	334.9
14°	337.4	331.4	330.3	329.5	331.1	333.2
14.5°	335.9	329.8	328.6	327.8	329.4	331.5
15°	334.3	328.1	326.9	325.9	327.7	329.8
15.5°	332.7	326.3	325.0	324.1	325.8	328.1
16°	331.1	324.5	323.2	322.3	323.9	326.4
16.5°	329.4	322.7	321.3	320.4	322.1	324.5
17°	327.7	320.8	319.4	318.4	320.2	322.7
17.5°	325.8	318.9	317.5	316.4	318.3	320.8
18°	324.0	316.9	315.5	314.4	316.3	318.9
18.5°	322.2	314.9	313.5	312.3	314.3	316.8
19°	320.3	313.0	311.5	310.3	312.3	314.9
19.5°	318.5	311.0	309.3	308.1	310.2	312.9
20°	316.4	308.9	307.2	306.0	308.0	310.9
20.5°	314.5	306.8	305.2	303.9	306.0	308.8
21°	312.4	304.7	303.1	301.8	303.9	306.7
21.5°	310.4	302.5	300.8	299.5	301.7	304.5
22°	308.2	300.3	298.6	297.2	299.5	302.4



TEST NUMBER: P522097

CATALOG NUMBER: RLLV4069BLE40AWHDM-5000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	306.0	298.1	296.4	295.0	297.2	300.1
23°	304.0	295.9	294.0	292.7	294.9	298.0
23.5°	301.7	293.6	291.6	290.3	292.5	295.8
24°	299.4	291.1	289.3	287.9	290.2	293.5
24.5°	297.1	288.7	286.9	285.5	287.8	291.1
25°	294.7	286.3	284.4	282.9	285.4	288.7
25.5°	292.1	283.6	282.0	280.4	282.8	286.3
26°	289.7	281.1	279.4	277.8	280.3	283.7
26.5°	287.3	278.5	276.8	275.2	277.8	281.3
27°	284.6	275.9	274.1	272.6	275.1	278.8
27.5°	282.0	273.2	271.5	270.0	272.5	276.1
28°	279.3	270.4	268.9	267.1	269.9	273.5
28.5°	276.6	267.5	266.0	264.3	267.1	270.8
29°	273.7	264.7	263.2	261.5	264.3	268.1
29.5°	270.8	261.7	260.4	258.6	261.5	265.2
30°	267.9	258.7	257.5	255.7	258.5	262.4
30.5°	264.8	255.7	254.5	252.8	255.6	259.5
31°	261.8	252.5	251.5	249.7	252.7	256.6
31.5°	258.6	249.3	248.4	246.6	249.6	253.5
32°	255.4	246.0	245.3	243.6	246.6	250.4
32.5°	252.1	242.6	242.0	240.3	243.3	247.3
33°	248.6	239.1	238.7	237.0	240.1	244.1
33.5°	245.2	235.6	235.3	233.6	236.8	240.6
34°	241.6	231.9	231.7	230.3	233.3	237.4
34.5°	237.9	228.1	228.2	226.7	229.9	233.9
35°	234.1	224.1	224.5	223.1	226.3	230.3
35.5°	230.3	220.2	220.7	219.4	222.6	226.5
36°	226.2	216.0	216.8	215.4	218.9	222.6
36.5°	222.2	211.9	212.9	211.4	214.9	218.6
37°	218.0	207.5	208.7	207.4	210.9	214.6
37.5°	213.9	203.2	204.5	203.3	206.6	210.6
38°	209.6	198.7	200.2	198.9	202.4	206.2
38.5°	205.2	194.2	196.0	194.5	197.9	201.7
39°	200.7	189.5	191.5	189.9	193.5	197.3
39.5°	196.4	184.8	186.9	185.2	189.0	192.6
40°	191.8	180.1	182.2	180.6	184.3	187.9
40.5°	187.3	175.4	177.5	175.9	179.6	183.2
41°	182.7	170.8	172.6	171.4	174.8	178.5
41.5°	178.1	166.0	167.8	166.6	170.1	173.7
42°	173.3	161.4	163.2	162.0	165.4	168.8
42.5°	168.5	156.5	158.4	157.2	160.7	164.0
43°	163.9	151.7	153.7	152.4	156.1	159.2
43.5°	159.2	147.1	149.0	147.8	151.3	154.4
44°	154.6	142.5	144.2	143.2	146.6	149.6
44.5°	150.0	138.0	139.7	138.6	142.0	145.0



TEST NUMBER: P522097

CATALOG NUMBER: RLLV4069BLE40AWHDM-5000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	145.5	133.6	135.0	134.1	137.4	140.4
45.5°	141.0	129.2	130.7	129.7	132.9	135.8
46°	136.5	125.0	126.3	125.4	128.5	131.4
46.5°	132.0	120.7	122.2	121.1	124.2	127.0
47°	127.6	116.5	117.9	116.9	120.0	122.7
47.5°	123.6	112.7	114.0	112.9	115.8	118.4
48°	119.4	108.7	110.0	109.0	111.9	114.5
48.5°	115.4	105.1	106.1	105.3	108.0	110.4
49°	111.6	101.4	102.4	101.6	104.3	106.5
49.5°	107.7	97.8	98.8	98.1	100.6	102.9
50°	104.0	94.3	95.4	94.6	97.2	99.2
50.5°	100.3	91.0	91.9	91.1	93.6	95.6
51°	96.8	87.8	88.7	87.9	90.2	92.1
51.5°	93.3	84.6	85.4	84.7	87.0	88.9
52°	90.1	81.6	82.2	81.7	83.7	85.7
52.5°	86.9	78.7	79.4	78.8	80.7	82.6
53°	83.6	75.8	76.4	75.9	77.8	79.5
53.5°	80.6	73.1	73.7	73.2	75.0	76.6
54°	77.5	70.5	71.1	70.5	72.3	73.8
54.5°	74.8	67.8	68.4	68.0	69.6	71.1
55°	72.1	65.3	65.9	65.5	67.0	68.4
55.5°	69.5	63.1	63.4	63.1	64.5	66.0
56°	66.8	60.7	61.1	60.8	62.3	63.5
56.5°	64.4	58.6	59.0	58.6	59.9	61.1
57°	62.1	56.4	57.0	56.4	57.9	58.8
57.5°	59.7	54.4	55.0	54.4	55.6	56.6
58°	57.6	52.3	52.8	52.3	53.7	54.5
58.5°	55.5	50.5	50.8	50.5	51.7	52.4
59°	53.3	48.7	49.0	48.8	49.7	50.6
59.5°	51.4	47.0	47.3	47.0	47.9	48.7
60°	49.4	45.2	45.7	45.2	46.2	46.9
60.5°	47.7	43.6	43.9	43.6	44.6	45.1
61°	45.9	42.0	42.5	42.0	43.0	43.4
61.5°	44.2	40.6	41.0	40.6	41.2	41.6
62°	42.5	39.2	39.5	39.2	39.7	40.0
62.5°	41.1	37.9	38.0	37.8	38.2	38.6
63°	39.6	36.3	36.7	36.2	36.8	37.3
63.5°	38.2	35.0	35.4	35.0	35.6	35.7
64°	36.5	33.9	34.2	33.8	34.2	34.4
64.5°	35.2	32.7	33.0	32.7	33.0	33.1
65°	33.9	31.6	32.0	31.6	31.8	31.9
65.5°	32.7	30.7	30.8	30.5	30.7	30.8
66°	31.6	29.5	29.8	29.4	29.7	29.6
66.5°	30.7	28.7	28.8	28.5	28.6	28.6
67°	29.4	27.4	27.7	27.3	27.4	27.3



TEST NUMBER: P522097

CATALOG NUMBER: RLLV4069BLE40AWHDM-5000K-UNIT

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	28.4	26.7	26.8	26.6	26.6	26.4
68°	27.2	25.6	25.9	25.5	25.5	25.5
68.5°	26.5	24.9	25.2	24.7	24.7	24.5
69°	25.5	23.9	24.2	23.8	23.7	23.7
69.5°	24.6	23.3	23.6	23.1	23.0	22.8
70°	23.8	22.4	22.7	22.2	22.2	22.0
70.5°	23.1	21.9	21.9	21.7	21.6	21.1
71°	22.1	21.0	21.1	20.8	20.7	20.1
71.5°	21.4	20.2	20.3	20.1	19.9	19.4
72°	20.5	19.5	19.9	19.3	19.2	18.7
72.5°	20.0	19.0	19.1	18.5	18.4	18.2
73°	19.2	18.3	18.3	18.1	18.0	17.3
73.5°	18.5	17.6	17.7	17.4	17.2	16.7
74°	18.2	17.2	17.1	16.7	16.5	16.3
74.5°	17.3	16.6	16.4	16.2	16.1	15.8
75°	16.7	16.0	15.9	15.7	15.5	14.9
75.5°	16.4	15.5	15.6	14.9	14.8	14.3
76°	15.7	14.8	14.8	14.4	14.2	13.9
76.5°	14.9	14.1	14.2	13.8	13.6	13.1
77°	14.3	13.3	13.3	13.0	12.8	12.5
77.5°	13.8	12.6	12.7	12.3	12.2	11.8
78°	13.0	11.9	12.0	11.5	11.5	11.2
78.5°	12.5	11.2	11.2	11.1	11.0	10.8
79°	11.5	10.5	10.5	10.2	10.1	9.8
79.5°	11.0	9.6	9.8	9.5	9.4	9.4
80°	10.2	9.2	9.3	8.9	8.8	8.7
80.5°	9.5	8.5	8.5	8.0	8.2	7.9
81°	9.0	7.7	7.6	7.7	7.6	7.6
81.5°	8.0	7.2	7.0	6.8	6.9	6.8
82°	7.7	6.2	6.3	6.0	6.0	6.1
82.5°	6.8	5.9	5.8	5.3	5.7	5.7
83°	6.0	5.0	5.0	4.8	4.9	5.0
83.5°	5.5	4.2	4.2	4.0	4.2	4.3
84°	4.9	3.8	3.8	3.3	3.8	4.0
84.5°	4.2	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: P522097

CATALOG NUMBER: RLLV4069BLE40AWHDM-5000K-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)