

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: P522093

Luminaire Tested: **RLLV4069BLE40AWHDM-2700K-UNIT**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522093
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-2700K-UNIT
Description: Surface Mount Downlight Fixture, Single Unit
Light Source: (16) 2700K CCT, 92 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

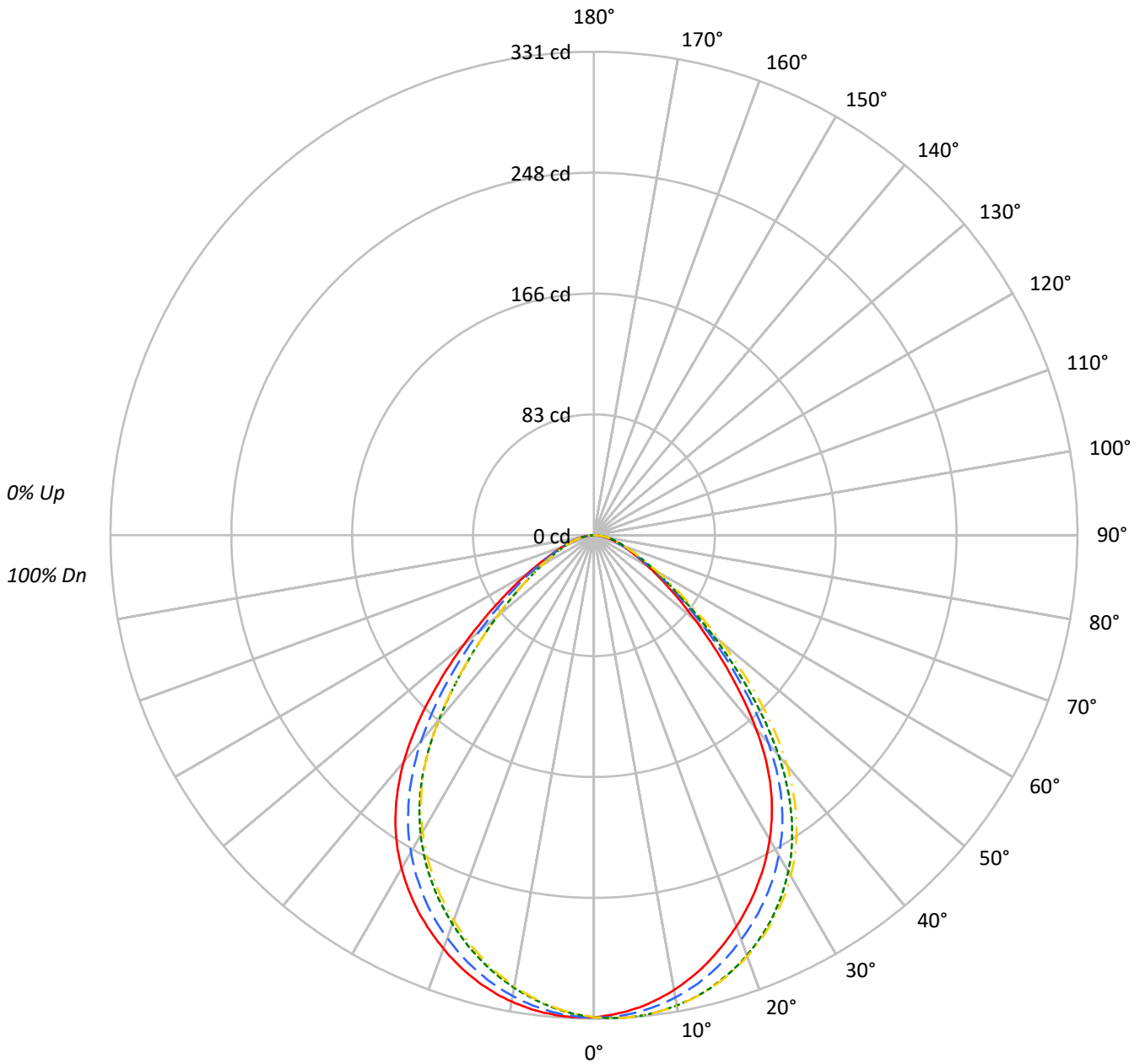
Lumens per Lamp: 644.87 (16 lamps)
Luminaire Lumens: 605.0 lumens
Efficiency: 5.9%
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.19
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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



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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	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6
1	7	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5
2	6	6	5	5	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
3	6	5	5	4	5	5	5	4	5	5	4	5	4	4	5	4	4	5	4	4	4
4	5	5	4	4	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	4	4	3	5	4	4	3	4	4	3	4	4	3	4	4	3	4	4	3	3
6	5	4	3	3	4	4	3	3	4	3	3	4	3	3	3	3	3	3	3	3	3
7	4	4	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
8	4	3	3	2	4	3	3	2	3	3	2	3	3	2	3	3	2	3	3	2	2
9	4	3	3	2	4	3	3	2	3	3	2	3	2	2	3	2	2	3	2	2	2
10	3	3	2	2	3	3	2	2	3	2	2	3	2	2	3	2	2	3	2	2	2

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	40798	40798	40798	40798
5°	40358	41016	40842	40259
10°	39670	41026	40687	39482
15°	38680	40791	40267	38475
20°	37484	40246	39615	37248
25°	36083	39383	38770	35783
30°	34322	37947	37576	33851
35°	31850	35607	35758	30990
40°	27782	31703	32671	26637
45°	22495	26218	27896	21411
50°	17478	20304	22304	16632
55°	13510	15363	17109	12907
60°	10629	11939	13027	10258
65°	8539	9592	10060	8481
70°	7263	8131	7986	7408
75°	6494	7593	7067	7020
80°	5694	7260	6762	5979
85°	3262	6239	5389	3120



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	31.0	5.1	0.3
10°-20°	87.1	14.4	0.8
20°-30°	126.4	20.9	1.2
30°-40°	138.1	22.8	1.3
40°-50°	108.6	18.0	1.1
50°-60°	62.5	10.3	0.6
60°-70°	31.8	5.3	0.3
70°-80°	15.6	2.6	0.2
80°-90°	3.9	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°	244.5	40.4	2.4
0°-40°	382.6	63.2	3.7
0°-60°	553.7	91.5	5.4
0°-90°	605.0	100.0	5.9
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°	605.0	100.0	5.9

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	330	330	330	330	330	
5°	325	331	329	324	325	31
15°	302	319	315	301	302	85
25°	265	289	284	262	265	122
35°	211	236	237	205	211	131
45°	129	150	160	122	129	100
55°	63	71	79	60	63	57
65°	29	33	34	29	29	30
75°	14	16	15	15	14	15
85°	2	4	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°	330.1	330.1	330.1	330.1	330.1	330.1	330.1	330.1	330.1	330.1	330.1
0.5°	329.7	329.8	330.2	331.2	330.2	330.2	330.2	330.1	330.1	330.0	330.2
1°	329.4	329.7	330.2	331.2	330.4	330.4	330.3	330.2	330.2	330.0	330.1
1.5°	329.0	329.5	330.2	331.2	330.6	330.6	330.6	330.3	330.2	330.0	329.9
2°	328.7	329.2	330.1	331.2	330.8	330.8	330.8	330.4	330.2	330.0	329.7
2.5°	328.2	328.9	329.9	331.1	330.9	330.9	330.9	330.5	330.2	329.8	329.4
3°	327.7	328.6	329.6	331.0	330.9	331.0	330.9	330.5	330.1	329.5	329.1
3.5°	327.2	328.2	329.3	330.8	330.9	331.0	330.9	330.5	330.0	329.3	328.9
4°	326.6	327.7	328.9	330.6	330.9	331.0	330.9	330.4	329.8	329.0	328.5
4.5°	326.0	327.3	328.6	330.4	330.8	331.0	330.8	330.3	329.6	328.7	328.0
5°	325.3	326.7	328.1	330.1	330.6	330.9	330.6	330.2	329.2	328.3	327.6
5.5°	324.7	326.2	327.6	329.8	330.5	330.7	330.5	329.9	328.9	327.8	327.0
6°	323.9	325.5	327.1	329.3	330.2	330.5	330.3	329.6	328.7	327.4	326.4
6.5°	323.1	324.9	326.5	328.9	330.0	330.3	330.1	329.2	328.2	326.9	325.8
7°	322.2	324.1	325.9	328.4	329.7	330.0	329.7	328.9	327.8	326.3	325.2
7.5°	321.2	323.3	325.2	327.9	329.3	329.7	329.3	328.4	327.3	325.7	324.5
8°	320.3	322.5	324.6	327.3	328.9	329.3	328.9	327.9	326.7	325.0	323.7
8.5°	319.3	321.6	323.8	326.7	328.4	328.9	328.6	327.5	326.2	324.4	322.9
9°	318.3	320.7	323.0	326.1	327.9	328.4	328.1	326.9	325.5	323.7	322.2
9.5°	317.3	319.8	322.2	325.3	327.5	327.8	327.6	326.3	324.9	322.8	321.2
10°	316.1	318.7	321.3	324.6	326.9	327.3	327.0	325.6	324.2	322.0	320.3
10.5°	314.9	317.6	320.4	323.8	326.3	326.7	326.4	325.0	323.5	321.2	319.4
11°	313.7	316.5	319.4	323.0	325.6	326.1	325.8	324.3	322.6	320.2	318.4
11.5°	312.4	315.4	318.4	322.1	325.0	325.4	325.1	323.5	321.9	319.2	317.3
12°	311.1	314.2	317.3	321.2	324.2	324.7	324.4	322.7	321.0	318.3	316.2
12.5°	309.8	313.0	316.2	320.1	323.5	323.9	323.7	321.9	320.0	317.3	315.1
13°	308.3	311.8	315.2	319.1	322.6	323.2	322.9	321.0	319.1	316.2	313.9
13.5°	307.0	310.5	313.9	318.1	321.8	322.3	322.1	320.0	318.1	315.1	312.8
14°	305.5	309.1	312.7	317.0	320.9	321.4	321.2	319.1	317.1	313.9	311.5
14.5°	303.9	307.7	311.4	315.9	319.9	320.5	320.2	318.1	316.0	312.7	310.2
15°	302.3	306.3	310.1	314.7	318.8	319.5	319.2	317.1	314.7	311.5	308.9
15.5°	300.7	304.8	308.7	313.4	317.7	318.5	318.2	316.0	313.6	310.2	307.5
16°	299.2	303.2	307.3	312.1	316.6	317.4	317.1	314.8	312.4	308.8	306.1
16.5°	297.5	301.7	305.8	310.8	315.4	316.3	316.0	313.6	311.1	307.5	304.7
17°	295.8	300.1	304.4	309.5	314.3	315.1	314.7	312.4	309.8	306.0	303.2
17.5°	294.1	298.5	302.9	308.0	313.0	313.8	313.5	311.1	308.5	304.6	301.8
18°	292.3	296.8	301.3	306.6	311.7	312.5	312.3	309.8	307.1	303.1	300.2
18.5°	290.4	295.2	299.7	305.1	310.4	311.2	310.9	308.4	305.7	301.6	298.5
19°	288.7	293.4	298.0	303.6	309.0	309.9	309.6	307.0	304.3	300.0	296.8
19.5°	286.8	291.7	296.5	301.9	307.5	308.5	308.2	305.7	302.7	298.4	295.2
20°	285.0	289.9	294.7	300.4	306.0	307.0	306.8	304.2	301.2	296.8	293.4
20.5°	283.1	288.1	293.0	298.7	304.5	305.6	305.4	302.7	299.6	295.2	291.7
21°	281.2	286.4	291.3	297.1	303.0	304.0	303.9	301.1	298.1	293.4	290.0
21.5°	279.1	284.5	289.5	295.4	301.4	302.4	302.3	299.6	296.5	291.7	288.2
22°	277.2	282.5	287.7	293.6	299.7	300.7	300.7	298.0	294.9	290.1	286.4



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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°	275.1	280.7	285.8	291.9	298.0	299.1	299.1	296.5	293.1	288.3	284.5
23°	273.2	278.7	283.9	290.1	296.3	297.4	297.5	294.8	291.5	286.5	282.5
23.5°	271.1	276.7	282.1	288.1	294.4	295.6	295.8	293.1	289.7	284.7	280.5
24°	269.0	274.8	280.0	286.3	292.7	293.8	294.1	291.5	287.9	282.7	278.6
24.5°	266.9	272.7	278.1	284.2	290.8	291.9	292.4	289.6	286.2	280.7	276.5
25°	264.6	270.6	276.1	282.2	288.8	290.0	290.5	287.7	284.3	278.7	274.4
25.5°	262.4	268.4	273.9	280.1	286.7	288.0	288.7	285.9	282.4	276.7	272.2
26°	260.1	266.1	271.8	278.0	284.6	286.0	286.7	284.0	280.4	274.7	269.9
26.5°	257.9	263.9	269.7	275.8	282.5	283.8	284.7	282.1	278.5	272.6	267.6
27°	255.5	261.7	267.5	273.5	280.3	281.7	282.6	280.1	276.4	270.5	265.4
27.5°	253.1	259.4	265.2	271.3	278.1	279.6	280.6	278.1	274.4	268.3	263.1
28°	250.7	257.0	262.9	269.0	275.8	277.3	278.5	276.1	272.2	266.0	260.7
28.5°	248.2	254.6	260.6	266.6	273.5	274.8	276.2	273.9	270.1	263.7	258.3
29°	245.8	252.2	258.1	264.2	271.0	272.4	274.0	271.8	267.9	261.5	255.7
29.5°	243.1	249.7	255.6	261.7	268.4	269.9	271.7	269.6	265.6	259.2	253.1
30°	240.5	247.2	253.1	259.1	265.9	267.4	269.4	267.2	263.3	256.7	250.5
30.5°	237.9	244.6	250.5	256.4	263.3	264.8	267.0	264.9	260.9	254.2	247.9
31°	235.2	242.0	247.8	253.7	260.7	262.1	264.5	262.6	258.6	251.7	245.2
31.5°	232.3	239.3	245.2	251.0	258.0	259.4	261.9	260.1	256.1	249.1	242.5
32°	229.6	236.6	242.5	248.0	255.1	256.5	259.3	257.6	253.6	246.5	239.7
32.5°	226.7	233.7	239.7	245.2	252.1	253.5	256.6	254.9	251.0	243.8	236.7
33°	223.7	230.9	236.7	242.0	249.1	250.5	253.7	252.2	248.3	240.9	233.6
33.5°	220.6	227.8	233.7	238.9	245.8	247.5	250.8	249.5	245.6	238.1	230.6
34°	217.6	224.7	230.7	235.7	242.6	244.3	247.8	246.6	242.7	235.2	227.4
34.5°	214.4	221.6	227.5	232.3	239.3	241.0	244.9	243.8	239.9	232.3	224.3
35°	211.1	218.3	224.3	228.9	236.0	237.5	241.7	240.7	237.0	229.1	221.0
35.5°	207.7	215.0	220.8	225.5	232.4	233.9	238.6	237.7	233.9	226.0	217.6
36°	204.0	211.6	217.4	221.9	228.8	230.3	235.2	234.6	230.8	222.8	214.2
36.5°	200.4	207.9	213.8	218.2	225.1	226.7	231.8	231.3	227.5	219.5	210.6
37°	196.7	204.2	210.1	214.3	221.3	222.9	228.3	228.0	224.2	216.1	207.0
37.5°	193.0	200.5	206.4	210.5	217.4	219.0	224.7	224.6	220.8	212.6	203.4
38°	189.0	196.6	202.5	206.5	213.5	215.0	221.1	221.1	217.2	209.1	199.7
38.5°	184.9	192.7	198.4	202.3	209.4	211.0	217.5	217.4	213.7	205.3	195.9
39°	180.8	188.6	194.3	198.2	205.3	206.7	213.6	213.7	210.1	201.4	192.2
39.5°	176.6	184.5	190.1	193.9	201.0	202.4	209.7	209.9	206.4	197.6	188.1
40°	172.2	180.3	185.9	189.6	196.5	198.0	205.6	206.1	202.5	193.7	184.1
40.5°	168.0	175.8	181.6	185.1	192.2	193.6	201.4	202.0	198.5	189.7	180.0
41°	163.6	171.4	177.1	180.6	187.5	189.1	197.2	197.9	194.4	185.6	175.8
41.5°	159.2	167.0	172.7	175.9	183.1	184.6	192.9	193.8	190.3	181.6	171.7
42°	154.8	162.6	168.1	171.4	178.5	179.8	188.6	189.6	186.1	177.3	167.6
42.5°	150.3	158.1	163.6	166.8	173.8	175.1	184.0	185.1	181.9	173.0	163.3
43°	146.0	153.6	159.0	162.2	169.1	170.3	179.5	180.7	177.6	168.7	159.0
43.5°	141.5	149.1	154.5	157.6	164.3	165.4	174.8	176.2	173.1	164.2	154.8
44°	137.1	144.7	149.9	152.8	159.5	160.6	170.1	171.7	168.7	159.9	150.4
44.5°	132.9	140.2	145.3	148.1	154.8	155.8	165.4	167.1	164.1	155.6	146.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	128.7	135.8	140.9	143.5	150.0	151.1	160.5	162.6	159.6	151.2	142.1
45.5°	124.5	131.5	136.5	139.0	145.3	146.2	155.9	157.9	155.2	146.8	137.8
46°	120.4	127.3	132.0	134.5	140.7	141.4	151.1	153.2	150.8	142.3	133.7
46.5°	116.5	123.0	127.8	130.1	136.0	136.6	146.3	148.6	146.2	137.9	129.6
47°	112.5	119.0	123.4	125.6	131.4	131.9	141.5	144.0	141.8	133.6	125.5
47.5°	108.6	114.9	119.1	121.4	126.9	127.4	136.9	139.5	137.4	129.4	121.5
48°	104.9	110.9	115.2	117.0	122.5	122.9	132.2	134.9	133.0	125.2	117.6
48.5°	101.2	107.2	111.2	112.9	118.1	118.4	127.7	130.6	128.6	121.1	113.8
49°	97.6	103.5	107.4	108.8	113.9	114.0	123.1	126.2	124.3	117.0	109.9
49.5°	94.4	99.8	103.6	104.9	109.7	109.9	118.7	121.7	120.2	112.9	106.2
50°	90.9	96.3	99.8	101.0	105.6	105.7	114.3	117.4	116.0	108.9	102.6
50.5°	87.6	92.9	96.1	97.3	101.5	101.7	110.1	113.1	111.9	105.1	99.0
51°	84.4	89.5	92.6	93.7	97.7	97.7	105.9	109.0	107.8	101.4	95.6
51.5°	81.5	86.2	89.2	90.1	94.0	94.0	101.9	105.0	104.0	97.8	92.1
52°	78.6	83.0	85.9	86.7	90.4	90.4	97.8	101.0	100.1	94.3	88.9
52.5°	75.7	80.0	82.8	83.4	86.9	86.9	94.0	97.2	96.5	90.8	85.6
53°	72.8	77.0	79.6	80.3	83.6	83.4	90.4	93.5	93.0	87.4	82.6
53.5°	70.2	74.1	76.7	77.1	80.4	80.2	86.8	89.9	89.5	84.2	79.6
54°	67.6	71.4	73.7	74.1	77.2	77.0	83.3	86.3	86.0	81.0	76.7
54.5°	65.1	68.8	70.9	71.3	74.2	74.0	80.0	82.9	82.7	77.9	73.8
55°	62.7	66.2	68.2	68.5	71.3	71.0	76.7	79.6	79.4	75.0	71.1
55.5°	60.5	63.7	65.7	65.8	68.5	68.2	73.6	76.5	76.4	72.0	68.4
56°	58.2	61.2	63.0	63.3	65.9	65.7	70.6	73.3	73.3	69.3	65.9
56.5°	56.0	58.9	60.6	60.8	63.6	63.0	67.8	70.3	70.5	66.6	63.6
57°	53.9	56.7	58.3	58.5	61.0	60.5	65.1	67.5	67.7	64.2	61.1
57.5°	51.9	54.7	56.0	56.2	58.6	58.1	62.4	64.7	65.0	61.5	58.7
58°	49.9	52.5	53.8	54.1	56.3	55.9	59.9	62.1	62.4	59.1	56.4
58.5°	48.1	50.6	51.7	52.0	54.2	53.8	57.4	59.5	59.8	56.8	54.2
59°	46.4	48.6	49.7	49.8	52.2	51.7	55.1	57.1	57.3	54.6	52.2
59.5°	44.6	46.7	47.9	47.8	50.2	49.7	52.8	54.7	54.9	52.4	50.2
60°	43.0	44.9	45.9	46.0	48.3	47.9	50.8	52.4	52.7	50.3	48.2
60.5°	41.4	43.2	44.1	44.3	46.4	45.9	48.8	50.0	50.6	48.2	46.3
61°	39.8	41.6	42.3	42.6	44.6	44.2	46.7	48.1	48.4	46.3	44.4
61.5°	38.1	40.0	40.6	41.0	43.0	42.5	44.7	45.9	46.3	44.4	42.8
62°	36.7	38.3	39.2	39.3	41.4	40.8	43.0	44.0	44.4	42.5	41.1
62.5°	35.4	36.8	37.6	37.8	39.7	39.4	41.2	42.1	42.6	40.8	39.5
63°	34.1	35.4	36.1	36.3	38.2	37.9	39.5	40.5	40.8	39.3	37.9
63.5°	32.8	34.1	34.7	34.9	36.8	36.5	37.9	38.6	39.2	37.7	36.4
64°	31.5	32.8	33.2	33.5	35.5	35.0	36.4	36.9	37.4	36.1	35.1
64.5°	30.3	31.5	31.8	32.2	34.2	33.6	34.9	35.4	35.8	34.6	33.7
65°	29.2	30.2	30.6	31.1	32.8	32.3	33.5	33.9	34.4	33.1	32.4
65.5°	28.2	29.0	29.3	29.8	31.6	31.2	32.1	32.4	32.8	31.6	31.2
66°	27.1	28.0	28.2	28.7	30.5	30.0	30.9	31.1	31.4	30.4	29.9
66.5°	26.3	27.0	27.3	27.6	29.3	28.9	29.6	29.8	30.0	29.1	28.8
67°	25.1	25.9	26.4	26.4	28.2	27.8	28.4	28.5	28.8	28.1	27.8



TEST NUMBER: P522093

CATALOG NUMBER: RLLV4069BLE40AWHDM-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	24.2	24.9	25.0	25.5	27.3	26.7	27.3	27.5	27.5	26.8	26.5
68°	23.4	24.0	24.1	24.5	26.4	25.7	26.4	26.3	26.4	25.7	25.7
68.5°	22.5	23.1	23.2	23.5	25.1	24.8	25.1	25.1	25.1	24.6	24.7
69°	21.7	22.1	22.2	22.6	24.3	23.8	24.3	24.1	24.2	23.6	23.7
69.5°	20.9	21.4	21.3	21.7	23.3	23.1	23.2	23.2	23.2	22.8	22.9
70°	20.1	20.5	20.4	21.0	22.5	22.0	22.3	22.1	22.1	21.8	21.9
70.5°	19.3	19.9	19.8	20.0	21.7	21.3	21.5	21.2	21.2	20.9	21.1
71°	18.5	18.9	18.9	19.4	21.0	20.5	20.6	20.2	20.2	20.0	20.3
71.5°	17.8	18.3	18.4	18.7	20.2	19.9	19.9	19.6	19.5	19.3	19.8
72°	17.2	17.5	17.5	18.2	19.7	19.0	18.9	18.7	18.6	18.5	18.8
72.5°	16.7	16.8	16.8	17.4	18.9	18.4	18.3	18.1	18.0	17.7	18.3
73°	15.9	16.2	16.1	16.7	18.3	17.7	17.4	17.4	17.2	17.0	17.5
73.5°	15.3	15.6	15.6	16.0	17.6	17.0	16.8	16.7	16.6	16.4	16.8
74°	14.9	15.0	15.1	15.5	16.9	16.4	16.1	16.0	15.9	15.8	16.1
74.5°	14.5	14.5	14.5	15.0	16.6	15.9	15.5	15.3	15.1	15.2	15.7
75°	13.6	14.2	13.9	14.5	15.9	15.2	15.0	14.9	14.8	14.6	15.0
75.5°	13.1	13.5	13.5	13.8	15.1	14.7	14.3	14.3	14.3	14.1	14.5
76°	12.7	13.0	13.2	13.5	14.8	14.2	13.6	13.6	13.5	13.6	14.2
76.5°	12.0	12.4	12.4	13.1	14.2	13.6	13.4	13.3	13.1	13.3	13.5
77°	11.4	11.8	11.8	12.2	13.5	13.2	12.8	12.8	12.6	12.5	13.2
77.5°	10.9	11.3	11.4	11.7	13.1	12.5	12.1	12.2	12.0	11.9	12.3
78°	10.3	10.9	10.8	11.2	12.5	11.9	11.7	11.8	11.6	11.4	11.7
78.5°	9.9	10.2	10.3	10.5	11.8	11.4	11.3	11.3	11.1	10.9	11.3
79°	9.0	9.7	9.7	10.2	11.3	10.8	10.8	10.6	10.5	10.4	10.5
79.5°	8.6	9.0	8.9	9.5	10.8	10.3	10.2	10.3	10.1	9.8	10.1
80°	8.0	8.6	8.6	8.7	10.2	9.8	9.7	9.7	9.5	9.1	9.4
80.5°	7.2	8.0	7.9	8.4	9.7	9.2	9.1	9.0	8.8	8.7	8.6
81°	7.0	7.1	7.1	7.7	8.8	8.6	8.6	8.6	8.5	8.1	8.1
81.5°	6.2	6.9	7.0	7.0	8.5	8.2	8.1	8.1	7.8	7.3	7.5
82°	5.6	6.0	6.2	6.4	7.7	7.4	7.6	7.3	7.1	7.0	7.1
82.5°	5.2	5.5	5.6	5.8	7.1	7.1	7.0	7.1	6.8	6.2	6.3
83°	4.5	5.2	5.2	5.3	6.6	6.3	6.3	6.3	6.0	5.6	5.5
83.5°	3.9	4.5	4.5	4.7	5.8	5.7	5.8	5.6	5.4	5.3	5.3
84°	3.7	3.8	3.9	4.4	5.4	5.4	5.4	5.3	5.1	4.5	4.5
84.5°	3.0	3.5	3.7	3.7	4.7	4.7	4.7	4.6	4.5	3.9	3.8
85°	2.3	2.8	3.0	3.1	4.4	4.2	4.4	4.0	3.8	3.7	3.5
85.5°	2.1	2.1	2.3	2.7	3.7	3.7	3.7	3.7	3.5	3.0	2.8
86°	1.7	2.0	2.1	2.1	3.2	3.1	3.1	3.0	2.8	2.3	2.2
86.5°	1.5	1.4	1.6	1.9	2.7	2.7	2.6	2.3	2.2	2.1	2.0
87°	0.6	0.7	1.3	1.2	2.1	2.1	2.1	2.1	2.0	1.7	1.3
87.5°	0.5	0.5	0.6	0.6	1.9	1.9	1.9	1.6	1.4	1.5	0.8
88°	0.0	0.0	0.5	0.5	1.3	1.3	1.3	1.5	0.8	0.6	0.5
88.5°	0.0	0.0	0.0	0.0	0.6	0.6	0.6	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: P522093

CATALOG NUMBER: RLLV4069BLE40AWHDM-2700K-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: P522093

CATALOG NUMBER: RLLV4069BLE40AWHDM-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	330.1	330.1	330.1	330.1	330.1	330.1
0.5°	330.8	329.5	329.5	329.4	329.5	329.7
1°	330.6	329.2	329.1	329.0	329.1	329.4
1.5°	330.3	328.8	328.7	328.6	328.8	329.0
2°	330.0	328.3	328.1	328.1	328.3	328.7
2.5°	329.7	327.8	327.6	327.6	327.8	328.2
3°	329.2	327.3	327.1	326.9	327.3	327.7
3.5°	328.8	326.6	326.4	326.3	326.6	327.2
4°	328.3	326.0	325.7	325.6	326.0	326.6
4.5°	327.7	325.2	325.0	324.8	325.3	326.0
5°	327.2	324.5	324.2	324.0	324.6	325.3
5.5°	326.5	323.7	323.4	323.2	323.7	324.7
6°	325.8	322.8	322.5	322.3	322.9	323.9
6.5°	325.1	321.9	321.6	321.3	322.1	323.1
7°	324.3	321.0	320.7	320.3	321.2	322.2
7.5°	323.6	319.9	319.6	319.3	320.0	321.2
8°	322.7	318.9	318.6	318.3	319.0	320.3
8.5°	321.8	317.9	317.4	317.2	317.9	319.3
9°	320.9	316.9	316.2	316.0	316.8	318.3
9.5°	319.9	315.8	315.1	314.8	315.7	317.3
10°	318.8	314.6	313.9	313.6	314.5	316.1
10.5°	317.8	313.4	312.6	312.2	313.3	314.9
11°	316.7	312.1	311.3	310.9	312.0	313.7
11.5°	315.6	310.9	310.0	309.6	310.8	312.4
12°	314.5	309.5	308.6	308.2	309.4	311.1
12.5°	313.2	308.2	307.2	306.8	307.9	309.8
13°	312.0	306.8	305.8	305.2	306.5	308.3
13.5°	310.7	305.3	304.4	303.7	305.1	307.0
14°	309.3	303.8	302.8	302.0	303.5	305.5
14.5°	307.9	302.3	301.2	300.5	301.9	303.9
15°	306.4	300.7	299.6	298.8	300.4	302.3
15.5°	305.0	299.1	298.0	297.1	298.7	300.7
16°	303.5	297.5	296.3	295.4	296.9	299.2
16.5°	301.9	295.8	294.5	293.7	295.3	297.5
17°	300.4	294.1	292.8	291.8	293.5	295.8
17.5°	298.7	292.3	291.1	290.1	291.7	294.1
18°	297.0	290.5	289.2	288.2	290.0	292.3
18.5°	295.4	288.7	287.4	286.3	288.1	290.4
19°	293.6	286.9	285.5	284.4	286.3	288.7
19.5°	291.9	285.1	283.6	282.5	284.3	286.8
20°	290.1	283.2	281.6	280.5	282.4	285.0
20.5°	288.3	281.2	279.8	278.6	280.5	283.1
21°	286.4	279.3	277.8	276.6	278.6	281.2
21.5°	284.5	277.3	275.8	274.6	276.5	279.1
22°	282.5	275.3	273.7	272.4	274.6	277.2



TEST NUMBER: P522093

CATALOG NUMBER: RLLV4069BLE40AWHDM-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	280.5	273.3	271.7	270.4	272.4	275.1
23°	278.7	271.2	269.5	268.4	270.3	273.2
23.5°	276.5	269.1	267.3	266.1	268.2	271.1
24°	274.5	266.9	265.2	263.9	266.0	269.0
24.5°	272.3	264.6	263.0	261.7	263.8	266.9
25°	270.1	262.4	260.7	259.4	261.6	264.6
25.5°	267.8	260.0	258.5	257.0	259.3	262.4
26°	265.6	257.7	256.1	254.6	256.9	260.1
26.5°	263.3	255.3	253.7	252.3	254.6	257.9
27°	260.9	252.9	251.3	249.9	252.2	255.5
27.5°	258.5	250.4	248.9	247.5	249.8	253.1
28°	256.0	247.8	246.5	244.9	247.4	250.7
28.5°	253.5	245.2	243.9	242.3	244.9	248.2
29°	250.9	242.6	241.3	239.7	242.3	245.8
29.5°	248.2	239.9	238.7	237.1	239.7	243.1
30°	245.6	237.2	236.1	234.4	237.0	240.5
30.5°	242.7	234.4	233.3	231.7	234.3	237.9
31°	240.0	231.4	230.6	228.9	231.6	235.2
31.5°	237.1	228.5	227.7	226.0	228.8	232.3
32°	234.1	225.5	224.8	223.3	226.0	229.6
32.5°	231.0	222.4	221.9	220.3	223.1	226.7
33°	227.9	219.2	218.8	217.2	220.1	223.7
33.5°	224.7	215.9	215.6	214.2	217.0	220.6
34°	221.5	212.6	212.4	211.1	213.9	217.6
34.5°	218.1	209.1	209.2	207.9	210.7	214.4
35°	214.6	205.4	205.8	204.5	207.5	211.1
35.5°	211.1	201.8	202.3	201.1	204.0	207.7
36°	207.4	198.0	198.8	197.5	200.6	204.0
36.5°	203.7	194.2	195.1	193.7	197.0	200.4
37°	199.9	190.2	191.3	190.1	193.3	196.7
37.5°	196.1	186.2	187.4	186.3	189.4	193.0
38°	192.2	182.1	183.5	182.3	185.5	189.0
38.5°	188.1	178.0	179.6	178.3	181.4	184.9
39°	184.0	173.7	175.6	174.1	177.4	180.8
39.5°	180.0	169.4	171.3	169.8	173.2	176.6
40°	175.8	165.1	167.0	165.5	169.0	172.2
40.5°	171.7	160.8	162.7	161.3	164.6	168.0
41°	167.5	156.5	158.2	157.1	160.3	163.6
41.5°	163.2	152.2	153.8	152.7	155.9	159.2
42°	158.9	147.9	149.6	148.5	151.6	154.8
42.5°	154.5	143.5	145.2	144.1	147.4	150.3
43°	150.2	139.1	140.9	139.7	143.1	146.0
43.5°	146.0	134.8	136.6	135.5	138.7	141.5
44°	141.7	130.6	132.2	131.3	134.4	137.1
44.5°	137.5	126.5	128.1	127.0	130.2	132.9



TEST NUMBER: P522093

CATALOG NUMBER: RLLV4069BLE40AWHDM-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	133.3	122.5	123.8	122.9	125.9	128.7
45.5°	129.3	118.4	119.8	118.9	121.8	124.5
46°	125.1	114.6	115.8	115.0	117.8	120.4
46.5°	121.0	110.6	112.0	111.0	113.9	116.5
47°	117.0	106.8	108.1	107.2	110.0	112.5
47.5°	113.3	103.3	104.5	103.5	106.2	108.6
48°	109.5	99.7	100.9	99.9	102.5	104.9
48.5°	105.8	96.3	97.2	96.5	99.0	101.2
49°	102.3	93.0	93.9	93.2	95.6	97.6
49.5°	98.7	89.6	90.6	89.9	92.2	94.4
50°	95.3	86.5	87.4	86.8	89.1	90.9
50.5°	92.0	83.4	84.3	83.5	85.8	87.6
51°	88.7	80.4	81.3	80.5	82.7	84.4
51.5°	85.6	77.6	78.3	77.7	79.7	81.5
52°	82.6	74.8	75.3	74.9	76.7	78.6
52.5°	79.6	72.1	72.7	72.2	74.0	75.7
53°	76.6	69.5	70.1	69.6	71.4	72.8
53.5°	73.9	67.0	67.6	67.1	68.8	70.2
54°	71.1	64.6	65.1	64.6	66.3	67.6
54.5°	68.6	62.2	62.7	62.4	63.8	65.1
55°	66.1	59.9	60.4	60.0	61.4	62.7
55.5°	63.7	57.8	58.1	57.8	59.1	60.5
56°	61.2	55.7	56.0	55.8	57.1	58.2
56.5°	59.0	53.7	54.1	53.7	54.9	56.0
57°	56.9	51.7	52.2	51.7	53.1	53.9
57.5°	54.7	49.8	50.4	49.8	50.9	51.9
58°	52.8	48.0	48.4	48.0	49.2	49.9
58.5°	50.8	46.3	46.6	46.3	47.4	48.1
59°	48.9	44.6	44.9	44.7	45.6	46.4
59.5°	47.1	43.1	43.3	43.1	43.9	44.6
60°	45.3	41.5	41.8	41.5	42.3	43.0
60.5°	43.7	40.0	40.3	40.0	40.9	41.4
61°	42.0	38.5	39.0	38.5	39.4	39.8
61.5°	40.5	37.2	37.6	37.2	37.8	38.1
62°	39.0	35.9	36.2	35.9	36.4	36.7
62.5°	37.7	34.7	34.8	34.6	35.0	35.4
63°	36.3	33.3	33.7	33.2	33.8	34.1
63.5°	35.0	32.1	32.5	32.1	32.7	32.8
64°	33.5	31.1	31.4	31.0	31.4	31.5
64.5°	32.3	30.0	30.2	30.0	30.2	30.3
65°	31.1	29.0	29.3	29.0	29.1	29.2
65.5°	30.0	28.1	28.2	27.9	28.1	28.2
66°	29.0	27.0	27.3	26.9	27.2	27.1
66.5°	28.1	26.4	26.4	26.2	26.3	26.3
67°	26.9	25.1	25.4	25.1	25.1	25.1



TEST NUMBER: P522093

CATALOG NUMBER: RLLV4069BLE40AWHDM-2700K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	26.1	24.5	24.6	24.4	24.4	24.2
68°	25.0	23.5	23.8	23.4	23.4	23.4
68.5°	24.3	22.8	23.1	22.6	22.6	22.5
69°	23.4	21.9	22.2	21.8	21.7	21.7
69.5°	22.5	21.3	21.6	21.2	21.1	20.9
70°	21.8	20.5	20.8	20.3	20.3	20.1
70.5°	21.2	20.0	20.0	19.9	19.8	19.3
71°	20.2	19.2	19.3	19.0	18.9	18.5
71.5°	19.6	18.6	18.7	18.5	18.3	17.8
72°	18.8	17.9	18.3	17.7	17.6	17.2
72.5°	18.4	17.4	17.5	17.0	16.9	16.7
73°	17.6	16.8	16.8	16.6	16.5	15.9
73.5°	17.0	16.1	16.2	16.0	15.8	15.3
74°	16.7	15.8	15.7	15.3	15.1	14.9
74.5°	15.9	15.2	15.0	14.8	14.8	14.5
75°	15.3	14.7	14.6	14.4	14.2	13.6
75.5°	15.0	14.2	14.3	13.6	13.5	13.1
76°	14.4	13.5	13.5	13.2	13.0	12.7
76.5°	13.6	12.9	13.0	12.6	12.4	12.0
77°	13.1	12.2	12.2	11.9	11.7	11.4
77.5°	12.6	11.5	11.6	11.3	11.2	10.9
78°	11.9	10.9	11.0	10.6	10.6	10.3
78.5°	11.4	10.3	10.3	10.2	10.1	9.9
79°	10.6	9.7	9.7	9.4	9.3	9.0
79.5°	10.1	8.8	9.0	8.7	8.6	8.6
80°	9.4	8.4	8.5	8.2	8.1	8.0
80.5°	8.7	7.8	7.8	7.3	7.5	7.2
81°	8.3	7.1	7.0	7.1	7.0	7.0
81.5°	7.3	6.6	6.4	6.2	6.3	6.2
82°	7.1	5.7	5.8	5.5	5.5	5.6
82.5°	6.2	5.4	5.3	4.8	5.2	5.2
83°	5.5	4.5	4.5	4.4	4.5	4.5
83.5°	5.0	3.8	3.8	3.7	3.8	3.9
84°	4.5	3.5	3.5	3.1	3.5	3.7
84.5°	3.8	2.8	2.8	2.6	2.8	3.0
85°	3.2	2.2	2.1	2.1	2.1	2.3
85.5°	2.7	1.9	1.9	1.6	2.0	2.1
86°	2.1	1.3	1.3	1.3	1.4	1.7
86.5°	1.6	0.8	0.7	0.6	0.9	1.5
87°	1.2	0.6	0.5	0.5	0.5	0.6
87.5°	0.6	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: P522093

CATALOG NUMBER: RLLV4069BLE40AWHDM-2700K-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)