

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: P522099

Luminaire Tested: **RLLV6069SE010WHDM-3000K-UNIT**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A1809075B001)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: RLLV6069SE010WHDM-3000K-UNIT
Description: Surface Mount Downlight Fixture, Single Unit
Light Source: (72) 3000K CCT, 93 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

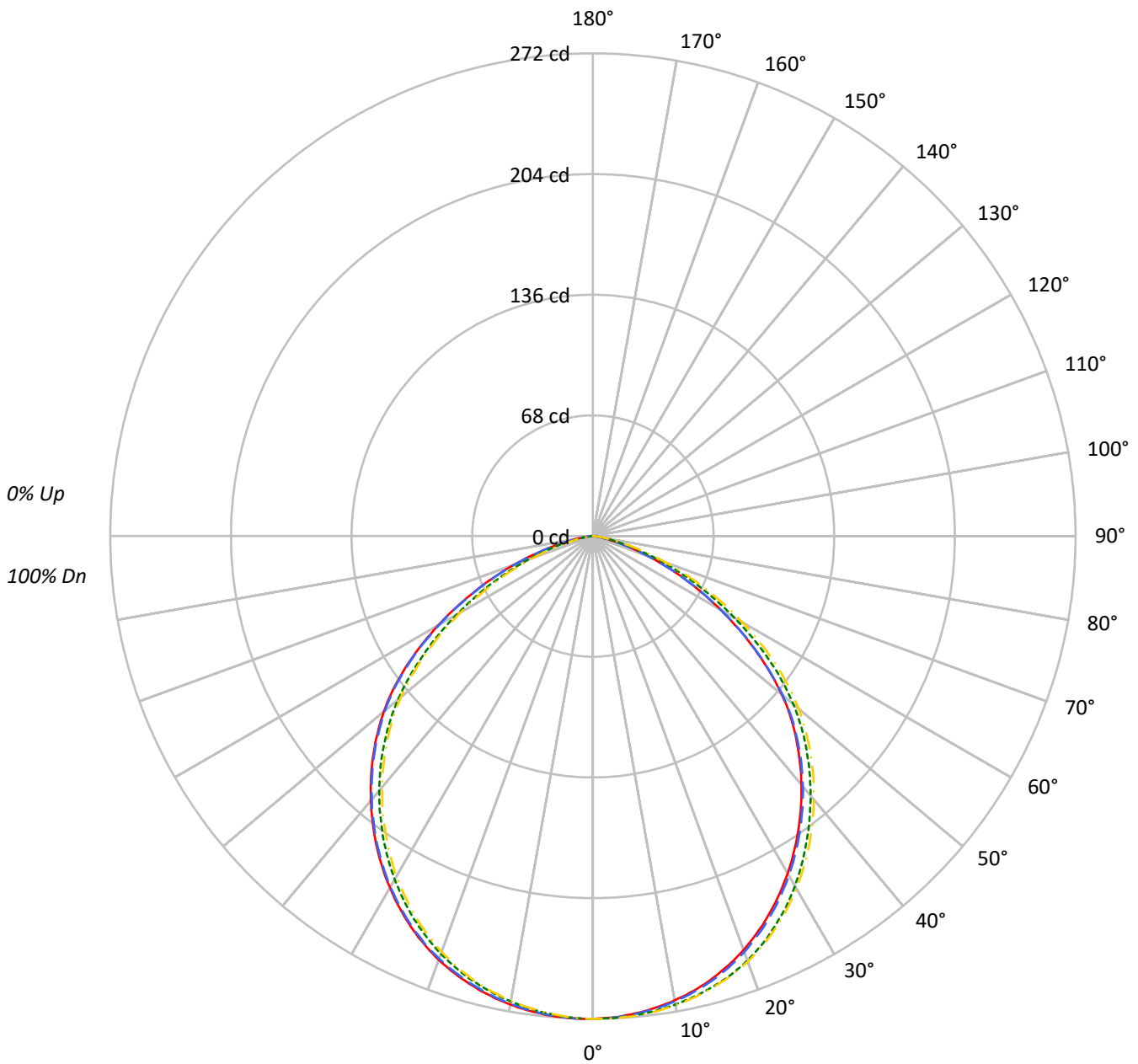
Lumens per Lamp: 706.09 (72 lamps)
Luminaire Lumens: 665.0 lumens
Efficiency: 1.3%
Efficacy: 99.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.33
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 6.7
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: P522099
CATALOG NUMBER: RLLV6069SE010WHDM-3000K-UNIT

Luminous Intensity Polar Plot



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



TEST NUMBER: P522099

CATALOG NUMBER: RLLV6069SE010WHDM-3000K-UNIT

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	0
RCR																		
0	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
8	1	1	1	0	1	1	1	0	1	1	0	1	1	0	1	1	0	0
9	1	1	0	0	1	1	0	0	1	0	0	1	0	0	1	0	0	0
10	1	1	0	0	1	1	0	0	1	0	0	1	0	0	1	0	0	0

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	14917	14917	14917	14917
5°	14863	14919	14930	14880
10°	14785	14918	14918	14824
15°	14665	14915	14887	14745
20°	14480	14847	14824	14614
25°	14215	14674	14686	14414
30°	13895	14414	14477	14141
35°	13512	14054	14235	13806
40°	13089	13654	13940	13404
45°	12567	13203	13575	12916
50°	11846	12580	13117	12230
55°	10657	11555	12301	11154
60°	9122	10109	11052	9758
65°	7368	8393	9482	8120
70°	5369	6411	7597	6187
75°	3262	4194	5316	4003
80°	1673	2178	2999	2052
85°	818	1321	1887	1321



TEST NUMBER: P522099

CATALOG NUMBER: RLLV6069SE010WHDM-3000K-UNIT

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	25.7	3.9	0.1
10°-20°	73.6	11.1	0.1
20°-30°	110.4	16.6	0.2
30°-40°	129.9	19.5	0.3
40°-50°	129.9	19.5	0.3
50°-60°	106.6	16.0	0.2
60°-70°	64.1	9.6	0.1
70°-80°	22.2	3.3	0.0
80°-90°	2.7	0.4	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°	209.7	31.5	0.4
0°-40°	339.6	51.1	0.7
0°-60°	576.1	86.6	1.1
0°-90°	665.0	100.0	1.3
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°	665.0	100.0	1.3

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	272	272	272	272	272	
5°	270	271	271	270	270	26
15°	258	263	262	260	258	73
25°	235	243	243	238	235	108
35°	202	210	213	206	202	126
45°	162	170	175	167	162	125
55°	112	121	129	117	112	99
65°	57	65	73	63	57	57
75°	15	20	25	19	15	18
85°	1	2	3	2	1	2
90°	0	0	0	0	0	



TEST NUMBER: P522099

CATALOG NUMBER: RLLV6069SE010WHDM-3000K-UNIT

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	272.1	272.1	272.1	272.1	272.1	272.1	272.1	272.1	272.1	272.1	272.1
0.5°	271.9	271.9	272.1	272.3	272.0	272.0	272.1	272.1	272.1	272.1	272.1
1°	271.8	271.8	272.0	272.3	272.0	272.1	272.1	272.1	272.1	272.1	272.1
1.5°	271.7	271.6	271.8	272.2	271.9	272.1	272.1	272.1	272.1	272.1	272.1
2°	271.6	271.6	271.7	272.1	271.9	272.0	272.1	272.1	272.1	272.1	272.0
2.5°	271.5	271.4	271.6	272.0	271.8	271.9	272.0	272.1	272.0	272.0	271.8
3°	271.3	271.3	271.5	271.8	271.7	271.8	271.9	271.9	271.9	271.8	271.7
3.5°	271.0	271.1	271.2	271.6	271.6	271.7	271.7	271.8	271.7	271.7	271.6
4°	270.6	270.7	271.0	271.5	271.5	271.6	271.6	271.7	271.6	271.6	271.4
4.5°	270.4	270.4	270.7	271.3	271.3	271.5	271.6	271.6	271.5	271.4	271.3
5°	270.1	270.2	270.4	271.1	271.1	271.3	271.4	271.5	271.3	271.2	271.1
5.5°	269.8	269.9	270.1	270.7	270.9	271.1	271.2	271.2	271.1	270.9	270.8
6°	269.4	269.5	269.8	270.4	270.6	270.8	271.1	270.9	270.8	270.6	270.5
6.5°	269.1	269.1	269.4	270.1	270.4	270.6	270.7	270.6	270.5	270.3	270.3
7°	268.6	268.8	269.1	269.8	270.1	270.3	270.5	270.3	270.3	270.0	270.0
7.5°	268.1	268.4	268.6	269.4	269.8	270.0	270.2	270.1	270.0	269.7	269.6
8°	267.7	267.9	268.2	269.1	269.5	269.7	269.9	269.7	269.6	269.3	269.3
8.5°	267.3	267.5	267.8	268.6	269.1	269.3	269.5	269.4	269.2	269.0	268.9
9°	266.7	266.9	267.3	268.1	268.8	269.0	269.1	269.0	268.9	268.5	268.4
9.5°	266.3	266.5	266.7	267.8	268.4	268.6	268.8	268.5	268.4	268.1	268.0
10°	265.6	265.9	266.3	267.2	268.0	268.2	268.4	268.1	268.0	267.6	267.6
10.5°	265.0	265.4	265.7	266.7	267.6	267.9	267.9	267.6	267.6	267.2	267.1
11°	264.4	264.7	265.1	266.2	267.1	267.4	267.5	267.2	267.1	266.6	266.6
11.5°	263.8	264.1	264.5	265.6	266.6	266.9	267.1	266.6	266.6	266.2	266.2
12°	263.1	263.4	263.9	265.1	266.2	266.5	266.6	266.2	266.1	265.5	265.5
12.5°	262.4	262.8	263.1	264.4	265.6	265.9	266.1	265.6	265.4	265.0	265.0
13°	261.7	262.1	262.5	263.9	265.1	265.4	265.5	265.0	264.9	264.3	264.4
13.5°	260.9	261.4	261.7	263.1	264.5	264.8	265.0	264.3	264.3	263.7	263.8
14°	260.1	260.6	261.0	262.5	264.0	264.2	264.4	263.8	263.7	263.0	263.0
14.5°	259.3	259.8	260.2	261.7	263.3	263.6	263.8	263.0	262.9	262.4	262.4
15°	258.4	259.0	259.4	261.1	262.8	262.9	263.1	262.4	262.3	261.7	261.7
15.5°	257.5	258.0	258.5	260.2	262.0	262.3	262.5	261.7	261.6	260.9	261.0
16°	256.6	257.1	257.7	259.3	261.3	261.6	261.7	260.9	260.8	260.2	260.3
16.5°	255.6	256.2	256.7	258.4	260.6	260.9	261.1	260.2	260.1	259.4	259.5
17°	254.6	255.3	255.7	257.5	259.9	260.1	260.3	259.4	259.3	258.5	258.6
17.5°	253.7	254.3	254.8	256.6	259.1	259.3	259.6	258.6	258.5	257.8	257.9
18°	252.6	253.2	253.7	255.5	258.2	258.4	258.7	257.8	257.7	256.8	257.0
18.5°	251.6	252.1	252.7	254.5	257.3	257.6	258.0	256.8	256.8	256.0	256.2
19°	250.5	251.0	251.6	253.4	256.5	256.7	257.0	256.1	255.9	255.1	255.3
19.5°	249.4	249.9	250.6	252.4	255.5	255.7	256.1	255.1	255.0	254.3	254.3
20°	248.2	248.8	249.4	251.2	254.5	254.8	255.2	254.3	254.1	253.3	253.4
20.5°	246.9	247.5	248.2	250.1	253.5	253.8	254.2	253.2	253.1	252.4	252.4
21°	245.7	246.5	246.9	249.0	252.4	252.8	253.1	252.2	252.1	251.3	251.4
21.5°	244.5	245.1	245.7	247.8	251.3	251.7	252.0	251.1	251.0	250.3	250.4
22°	243.2	243.8	244.5	246.6	250.1	250.6	250.9	250.1	249.9	249.2	249.3



TEST NUMBER: P522099

CATALOG NUMBER: RLLV6069SE010WHDM-3000K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	241.9	242.5	243.2	245.2	249.0	249.4	249.7	248.9	248.8	248.1	248.2
23°	240.6	241.2	241.9	244.0	247.8	248.3	248.6	247.8	247.6	246.9	246.9
23.5°	239.3	239.8	240.6	242.6	246.6	247.0	247.4	246.7	246.6	245.7	245.7
24°	237.9	238.5	239.2	241.3	245.2	245.7	246.3	245.4	245.3	244.5	244.6
24.5°	236.4	237.2	237.8	239.9	243.9	244.5	245.0	244.2	244.1	243.2	243.3
25°	235.0	235.8	236.3	238.5	242.6	243.2	243.7	242.9	242.8	242.0	242.1
25.5°	233.6	234.3	234.9	237.1	241.2	241.8	242.4	241.6	241.5	240.7	240.8
26°	232.1	232.9	233.5	235.7	239.8	240.4	241.0	240.3	240.2	239.4	239.5
26.5°	230.6	231.3	232.0	234.1	238.4	239.0	239.7	238.9	238.9	238.0	238.2
27°	229.0	229.8	230.4	232.6	237.0	237.7	238.3	237.6	237.5	236.6	236.8
27.5°	227.5	228.3	228.9	231.0	235.6	236.2	236.9	236.2	236.1	235.2	235.5
28°	225.9	226.8	227.3	229.5	234.0	234.6	235.5	234.6	234.7	233.9	234.0
28.5°	224.3	225.1	225.7	227.9	232.5	233.1	233.9	233.3	233.4	232.3	232.6
29°	222.7	223.5	224.2	226.3	230.9	231.5	232.4	231.7	231.8	230.9	231.1
29.5°	221.1	221.9	222.5	224.7	229.3	229.9	230.9	230.2	230.3	229.4	229.7
30°	219.5	220.3	220.9	223.0	227.7	228.3	229.4	228.6	228.7	228.0	228.2
30.5°	217.8	218.6	219.2	221.3	226.0	226.7	227.7	227.2	227.3	226.4	226.7
31°	216.1	216.9	217.5	219.7	224.3	225.0	226.0	225.6	225.9	224.8	225.1
31.5°	214.4	215.2	215.8	217.9	222.6	223.3	224.5	223.9	224.3	223.3	223.5
32°	212.6	213.6	214.0	216.2	220.9	221.5	222.8	222.3	222.6	221.6	221.9
32.5°	210.9	211.8	212.3	214.5	219.1	219.8	221.1	220.7	221.0	220.0	220.3
33°	209.1	210.0	210.5	212.7	217.4	218.0	219.5	219.0	219.4	218.4	218.6
33.5°	207.3	208.3	208.7	210.9	215.5	216.2	217.8	217.4	217.7	216.7	217.0
34°	205.5	206.5	207.0	209.0	213.7	214.4	216.1	215.6	216.1	215.0	215.3
34.5°	203.7	204.7	205.1	207.2	211.8	212.5	214.3	213.9	214.4	213.4	213.7
35°	201.9	202.9	203.3	205.3	210.0	210.7	212.5	212.2	212.7	211.7	212.0
35.5°	200.1	201.2	201.4	203.5	208.1	208.7	210.7	210.4	211.0	210.0	210.2
36°	198.2	199.2	199.6	201.5	206.3	206.9	208.8	208.7	209.2	208.2	208.5
36.5°	196.3	197.4	197.7	199.7	204.4	205.1	207.0	206.8	207.4	206.4	206.7
37°	194.4	195.4	195.7	197.7	202.5	203.1	205.1	205.1	205.6	204.6	204.9
37.5°	192.6	193.6	194.0	195.8	200.5	201.3	203.2	203.3	203.8	202.8	203.1
38°	190.6	191.7	192.0	193.9	198.7	199.4	201.4	201.4	202.0	201.1	201.3
38.5°	188.8	189.8	190.1	191.9	196.7	197.5	199.5	199.6	200.1	199.2	199.5
39°	186.8	187.8	188.1	190.0	194.8	195.5	197.6	197.7	198.4	197.4	197.7
39.5°	184.8	185.9	186.1	188.0	192.9	193.6	195.6	195.8	196.5	195.5	195.7
40°	182.9	184.0	184.1	186.0	190.8	191.6	193.7	194.0	194.8	193.7	193.9
40.5°	180.8	181.9	182.2	184.0	188.8	189.6	191.6	192.0	192.7	191.8	192.0
41°	178.9	180.0	180.1	181.9	186.8	187.6	189.7	190.2	190.8	189.9	190.1
41.5°	176.8	177.9	178.0	179.9	184.8	185.6	187.8	188.1	189.0	188.0	188.1
42°	174.8	175.8	175.9	177.8	182.8	183.6	185.8	186.3	187.0	186.1	186.2
42.5°	172.7	173.8	173.9	175.7	180.8	181.6	183.8	184.2	185.1	184.1	184.3
43°	170.6	171.8	171.8	173.6	178.7	179.4	181.8	182.2	183.2	182.2	182.3
43.5°	168.5	169.6	169.5	171.5	176.7	177.4	179.8	180.3	181.2	180.2	180.3
44°	166.4	167.5	167.5	169.3	174.5	175.3	177.7	178.1	179.2	178.1	178.3
44.5°	164.3	165.4	165.3	167.1	172.3	173.1	175.5	176.1	177.1	176.1	176.2



TEST NUMBER: P522099

CATALOG NUMBER: RLLV6069SE010WHDM-3000K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	162.1	163.2	163.2	165.0	170.3	171.0	173.4	174.1	175.1	174.2	174.3
45.5°	160.0	161.1	160.9	162.7	168.1	169.0	171.3	171.9	173.0	172.1	172.1
46°	157.8	159.0	158.7	160.6	165.9	166.8	169.2	169.8	171.0	170.1	170.2
46.5°	155.7	156.9	156.5	158.3	163.8	164.6	167.0	167.8	169.0	168.0	168.1
47°	153.4	154.6	154.4	156.0	161.6	162.4	164.8	165.6	166.9	165.9	165.8
47.5°	151.2	152.3	152.1	153.9	159.3	160.3	162.6	163.3	164.6	163.7	163.7
48°	149.0	149.9	149.7	151.4	157.0	158.1	160.4	161.1	162.5	161.6	161.6
48.5°	146.5	147.5	147.3	149.1	154.6	155.8	158.1	159.0	160.3	159.5	159.4
49°	144.2	145.1	144.8	146.7	152.3	153.5	155.9	156.7	158.2	157.3	157.2
49.5°	141.6	142.5	142.2	144.4	149.9	151.1	153.7	154.6	155.9	155.1	155.1
50°	138.9	139.9	139.7	141.8	147.5	148.7	151.3	152.2	153.8	152.9	152.8
50.5°	136.3	137.4	136.9	139.2	145.1	146.2	149.0	149.8	151.5	150.6	150.7
51°	133.6	134.7	134.3	136.4	142.5	143.6	146.6	147.4	149.2	148.3	148.3
51.5°	131.1	132.1	131.6	133.8	139.9	141.2	144.1	144.9	146.9	145.9	145.9
52°	128.4	129.3	128.7	131.1	137.3	138.5	141.4	142.5	144.3	143.5	143.5
52.5°	125.5	126.5	126.1	128.3	134.6	135.9	138.9	139.9	141.8	141.0	141.0
53°	122.8	123.8	123.2	125.6	132.0	133.2	136.2	137.3	139.3	138.4	138.4
53.5°	119.9	120.9	120.4	122.8	129.3	130.4	133.7	134.6	136.6	135.8	135.8
54°	117.2	118.1	117.6	120.0	126.4	127.6	131.0	131.9	134.0	133.1	133.2
54.5°	114.2	115.2	114.8	117.2	123.7	125.0	128.2	129.3	131.3	130.5	130.5
55°	111.5	112.4	111.9	114.3	120.9	122.1	125.5	126.6	128.7	127.9	127.8
55.5°	108.7	109.4	109.1	111.4	118.0	119.5	122.6	123.8	125.9	125.0	125.0
56°	105.8	106.5	106.3	108.5	115.1	116.6	119.9	121.1	123.1	122.4	122.3
56.5°	103.0	103.8	103.5	105.7	112.3	113.8	117.2	118.4	120.4	119.7	119.5
57°	100.2	100.9	100.5	102.9	109.4	110.8	114.4	115.4	117.7	116.8	116.7
57.5°	97.3	98.0	97.6	100.0	106.5	107.9	111.5	112.7	114.8	114.0	114.0
58°	94.4	95.2	94.8	97.1	103.6	105.2	108.7	109.9	112.0	111.2	111.2
58.5°	91.7	92.4	91.9	94.3	100.7	102.2	105.8	107.0	109.2	108.4	108.3
59°	88.9	89.5	89.2	91.4	97.9	99.4	103.0	104.2	106.3	105.6	105.5
59.5°	86.0	86.6	86.3	88.5	95.0	96.6	100.2	101.4	103.6	102.8	102.8
60°	83.2	83.9	83.5	85.7	92.2	93.7	97.3	98.6	100.8	100.0	99.9
60.5°	80.6	81.2	80.7	83.1	89.4	90.8	94.5	95.7	97.9	97.1	97.1
61°	77.8	78.4	77.9	80.2	86.6	88.0	91.8	92.9	95.2	94.3	94.3
61.5°	75.0	75.7	75.2	77.5	83.7	85.1	88.9	90.2	92.4	91.5	91.6
62°	72.3	73.0	72.5	74.7	81.0	82.4	86.1	87.2	89.6	88.7	88.7
62.5°	69.6	70.3	69.9	72.0	78.2	79.6	83.3	84.5	86.8	85.9	85.9
63°	67.1	67.7	67.2	69.4	75.4	77.0	80.6	81.8	84.0	83.2	83.1
63.5°	64.6	65.0	64.7	66.8	72.7	74.2	77.8	79.2	81.2	80.6	80.5
64°	61.9	62.5	62.1	64.1	70.1	71.4	75.2	76.3	78.5	77.8	77.7
64.5°	59.4	59.9	59.5	61.5	67.3	68.8	72.3	73.6	75.7	75.0	75.0
65°	56.8	57.3	56.9	58.9	64.7	66.1	69.7	70.9	73.1	72.2	72.2
65.5°	54.3	54.8	54.4	56.4	62.2	63.4	67.1	68.3	70.4	69.6	69.7
66°	51.8	52.4	51.9	53.9	59.5	61.0	64.3	65.6	67.7	67.1	67.0
66.5°	49.5	49.9	49.6	51.3	56.9	58.4	61.8	63.0	65.1	64.5	64.3
67°	47.0	47.5	47.0	49.0	54.4	55.8	59.1	60.4	62.4	61.8	61.7



TEST NUMBER: P522099

CATALOG NUMBER: RLLV6069SE010WHDM-3000K-UNIT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	44.7	45.1	44.7	46.6	51.9	53.3	56.6	57.8	59.8	59.2	59.2
68°	42.4	42.8	42.4	44.2	49.5	50.9	54.2	55.2	57.3	56.6	56.7
68.5°	40.0	40.5	40.0	41.9	47.1	48.3	51.6	52.7	54.8	54.1	54.1
69°	37.8	38.3	37.8	39.6	44.6	45.8	49.2	50.1	52.4	51.6	51.6
69.5°	35.5	36.2	35.6	37.5	42.3	43.5	46.7	47.7	49.8	49.1	49.2
70°	33.5	33.9	33.5	35.1	40.0	41.2	44.3	45.3	47.4	46.7	46.7
70.5°	31.4	31.7	31.4	33.0	37.7	38.8	41.9	43.0	45.0	44.3	44.3
71°	29.3	29.7	29.2	31.0	35.4	36.6	39.6	40.6	42.6	41.9	42.0
71.5°	27.3	27.8	27.3	28.9	33.3	34.4	37.5	38.3	40.2	39.6	39.8
72°	25.3	26.0	25.3	27.0	31.2	32.2	35.1	36.0	37.9	37.3	37.5
72.5°	23.6	24.0	23.5	24.9	29.1	30.1	32.9	33.8	35.7	35.1	35.1
73°	21.8	22.1	21.8	23.1	27.2	28.1	30.8	31.7	33.4	32.8	32.9
73.5°	20.2	20.3	20.2	21.4	25.1	26.2	28.8	29.6	31.3	30.8	30.8
74°	18.5	18.7	18.4	19.7	23.3	24.2	26.6	27.6	29.1	28.7	28.7
74.5°	16.9	17.1	16.8	18.0	21.6	22.3	24.7	25.4	27.1	26.7	26.7
75°	15.4	15.6	15.4	16.4	19.8	20.4	22.9	23.6	25.1	24.8	24.8
75.5°	13.9	14.2	13.8	15.0	18.1	18.8	21.1	21.7	23.2	22.8	23.0
76°	12.6	12.9	12.5	13.5	16.6	17.1	19.2	19.9	21.5	20.9	21.2
76.5°	11.4	11.6	11.4	12.2	15.0	15.5	17.6	18.2	19.6	19.1	19.2
77°	10.4	10.3	10.3	11.1	13.5	14.2	16.0	16.6	17.9	17.5	17.7
77.5°	9.1	9.2	9.0	10.0	12.2	12.9	14.6	15.1	16.3	15.9	16.0
78°	8.2	8.4	8.1	8.7	11.1	11.6	13.2	13.6	14.9	14.5	14.6
78.5°	7.1	7.3	7.1	7.9	10.0	10.5	11.7	12.1	13.4	13.0	13.2
79°	6.5	6.6	6.3	6.9	8.7	9.2	10.5	10.8	11.8	11.7	11.7
79.5°	5.6	5.7	5.5	6.1	8.0	8.3	9.5	9.8	10.7	10.5	10.5
80°	5.3	5.3	5.0	5.4	6.9	7.1	8.5	8.8	9.5	9.2	9.4
80.5°	4.6	4.5	4.4	4.7	6.1	6.5	7.3	7.7	8.5	8.2	8.4
81°	4.1	4.0	3.9	4.3	5.4	5.6	6.5	6.8	7.4	7.2	7.2
81.5°	3.7	3.7	3.7	3.7	4.7	5.2	5.6	5.9	6.6	6.5	6.4
82°	3.3	3.4	3.1	3.6	4.3	4.5	5.3	5.4	5.7	5.5	5.5
82.5°	3.0	3.0	2.9	3.0	3.8	4.0	4.4	4.7	5.3	5.0	5.2
83°	2.7	2.7	2.5	2.7	3.7	3.7	3.9	4.2	4.5	4.4	4.4
83.5°	2.2	2.2	2.2	2.2	3.1	3.2	3.7	3.8	3.9	4.0	3.8
84°	2.1	2.0	2.1	2.1	2.8	3.0	3.1	3.6	3.7	3.7	3.7
84.5°	1.7	1.6	1.6	1.9	2.3	2.6	2.9	3.0	3.3	3.2	3.1
85°	1.3	1.3	1.4	1.6	2.1	2.2	2.5	2.7	3.0	3.0	2.9
85.5°	1.4	1.4	1.5	1.2	2.0	2.1	2.1	2.3	2.6	2.6	2.6
86°	0.6	0.6	0.6	0.8	1.6	1.5	2.0	2.1	2.1	2.2	2.1
86.5°	0.6	0.5	0.6	0.6	1.2	1.3	1.5	1.9	2.0	2.1	2.0
87°	0.5	0.4	0.4	0.5	0.9	1.5	1.3	1.5	1.5	1.5	1.5
87.5°	0.0	0.0	0.0	0.0	0.6	0.7	1.3	1.3	1.3	1.4	1.3
88°	0.0	0.0	0.0	0.3	0.5	0.6	0.6	0.7	1.3	1.4	1.3
88.5°	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.6	0.6	0.6	0.6
89°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5
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: P522099

CATALOG NUMBER: RLLV6069SE010WHDM-3000K-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	0.0	0.0	0.0	0.3	0.3	0.0



TEST NUMBER: P522099

CATALOG NUMBER: RLLV6069SE010WHDM-3000K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	272.1	272.1	272.1	272.1	272.1	272.1
0.5°	272.4	272.0	271.9	272.0	271.9	271.9
1°	272.4	271.9	271.8	271.9	271.8	271.8
1.5°	272.3	271.8	271.7	271.8	271.7	271.7
2°	272.3	271.7	271.6	271.7	271.6	271.6
2.5°	272.2	271.6	271.5	271.5	271.5	271.5
3°	272.0	271.5	271.3	271.4	271.3	271.3
3.5°	271.9	271.2	271.1	271.1	271.1	271.0
4°	271.6	271.0	270.9	270.8	270.8	270.6
4.5°	271.5	270.7	270.6	270.5	270.4	270.4
5°	271.3	270.4	270.3	270.3	270.2	270.1
5.5°	271.1	270.2	270.0	269.9	269.9	269.8
6°	270.7	269.8	269.7	269.6	269.5	269.4
6.5°	270.4	269.5	269.4	269.2	269.1	269.1
7°	270.1	269.1	269.0	268.8	268.8	268.6
7.5°	269.8	268.6	268.6	268.3	268.3	268.1
8°	269.4	268.2	268.1	267.9	267.9	267.7
8.5°	269.0	267.9	267.8	267.5	267.4	267.3
9°	268.6	267.3	267.2	266.9	266.9	266.7
9.5°	268.1	266.8	266.7	266.5	266.4	266.3
10°	267.7	266.3	266.3	265.9	265.9	265.6
10.5°	267.2	265.7	265.7	265.3	265.4	265.0
11°	266.6	265.2	265.2	264.7	264.7	264.4
11.5°	266.1	264.6	264.5	264.1	264.1	263.8
12°	265.5	264.0	264.0	263.4	263.4	263.1
12.5°	264.9	263.3	263.3	262.9	262.7	262.4
13°	264.3	262.7	262.7	262.1	262.0	261.7
13.5°	263.7	262.0	262.0	261.4	261.3	260.9
14°	263.0	261.5	261.3	260.6	260.5	260.1
14.5°	262.3	260.5	260.5	259.9	259.7	259.3
15°	261.7	259.8	259.8	259.1	258.9	258.4
15.5°	260.9	259.1	259.0	258.2	258.0	257.5
16°	260.1	258.2	258.1	257.3	257.0	256.6
16.5°	259.3	257.3	257.3	256.5	256.2	255.6
17°	258.5	256.5	256.4	255.5	255.2	254.6
17.5°	257.8	255.5	255.5	254.5	254.3	253.7
18°	256.8	254.5	254.5	253.5	253.2	252.6
18.5°	256.0	253.6	253.5	252.5	252.1	251.6
19°	255.1	252.6	252.5	251.4	251.0	250.5
19.5°	254.2	251.6	251.4	250.4	249.9	249.4
20°	253.2	250.5	250.4	249.3	248.9	248.2
20.5°	252.2	249.4	249.3	248.1	247.6	246.9
21°	251.2	248.3	248.2	246.9	246.6	245.7
21.5°	250.1	247.0	246.9	245.7	245.2	244.5
22°	249.0	245.9	245.7	244.5	244.0	243.2



TEST NUMBER: P522099

CATALOG NUMBER: RLLV6069SE010WHDM-3000K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	247.9	244.7	244.5	243.2	242.6	241.9
23°	246.8	243.4	243.2	241.9	241.4	240.6
23.5°	245.5	242.2	242.0	240.6	240.0	239.3
24°	244.3	240.9	240.8	239.4	238.7	237.9
24.5°	243.0	239.5	239.4	237.9	237.4	236.4
25°	241.7	238.3	238.1	236.5	235.9	235.0
25.5°	240.4	236.9	236.7	235.1	234.6	233.6
26°	239.1	235.4	235.2	233.6	233.2	232.1
26.5°	237.8	234.0	233.8	232.2	231.6	230.6
27°	236.3	232.6	232.3	230.7	230.1	229.0
27.5°	234.9	231.1	230.9	229.2	228.5	227.5
28°	233.5	229.6	229.4	227.6	227.1	225.9
28.5°	232.1	228.1	227.8	226.1	225.5	224.3
29°	230.5	226.5	226.2	224.6	223.9	222.7
29.5°	229.0	224.9	224.6	222.9	222.3	221.1
30°	227.5	223.4	223.0	221.2	220.6	219.5
30.5°	226.1	221.7	221.3	219.7	218.9	217.8
31°	224.5	220.1	219.6	218.0	217.3	216.1
31.5°	222.9	218.5	218.0	216.3	215.6	214.4
32°	221.1	216.7	216.2	214.6	213.9	212.6
32.5°	219.5	215.0	214.5	212.8	212.2	210.9
33°	217.9	213.4	212.8	211.0	210.4	209.1
33.5°	216.2	211.6	211.1	209.2	208.7	207.3
34°	214.6	209.9	209.2	207.5	206.8	205.5
34.5°	212.8	208.1	207.4	205.6	205.1	203.7
35°	211.1	206.3	205.5	203.8	203.3	201.9
35.5°	209.3	204.3	203.8	201.9	201.4	200.1
36°	207.5	202.5	201.9	200.1	199.6	198.2
36.5°	205.7	200.6	200.1	198.2	197.7	196.3
37°	203.8	198.8	198.1	196.4	195.9	194.4
37.5°	202.1	196.9	196.3	194.5	194.0	192.6
38°	200.2	195.2	194.3	192.7	192.1	190.6
38.5°	198.5	193.2	192.4	190.6	190.2	188.8
39°	196.5	191.3	190.5	188.7	188.3	186.8
39.5°	194.7	189.2	188.6	186.7	186.4	184.8
40°	192.7	187.3	186.6	184.7	184.3	182.9
40.5°	190.8	185.3	184.6	182.7	182.3	180.8
41°	188.9	183.3	182.5	180.7	180.4	178.9
41.5°	186.9	181.3	180.5	178.8	178.3	176.8
42°	184.9	179.2	178.6	176.7	176.3	174.8
42.5°	182.9	177.2	176.6	174.5	174.3	172.7
43°	180.8	175.1	174.4	172.5	172.2	170.6
43.5°	178.8	173.0	172.4	170.4	170.2	168.5
44°	176.7	170.8	170.4	168.2	168.0	166.4
44.5°	174.7	168.7	168.1	166.2	165.8	164.3



TEST NUMBER: P522099

CATALOG NUMBER: RLLV6069SE010WHDM-3000K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	172.6	166.6	166.0	164.1	163.7	162.1
45.5°	170.5	164.4	163.9	161.9	161.7	160.0
46°	168.2	162.1	161.8	159.7	159.5	157.8
46.5°	166.1	159.8	159.5	157.6	157.3	155.7
47°	163.9	157.7	157.4	155.4	155.1	153.4
47.5°	161.8	155.3	155.2	153.2	152.9	151.2
48°	159.5	153.1	152.8	150.9	150.6	149.0
48.5°	157.2	150.7	150.6	148.6	148.3	146.5
49°	155.0	148.3	148.3	146.2	145.9	144.2
49.5°	152.8	145.9	145.9	143.8	143.5	141.6
50°	150.4	143.4	143.5	141.4	141.0	138.9
50.5°	148.0	140.9	141.0	138.7	138.4	136.3
51°	145.6	138.3	138.4	136.1	135.8	133.6
51.5°	143.2	135.7	135.7	133.5	133.1	131.1
52°	140.7	133.1	133.0	130.9	130.4	128.4
52.5°	138.1	130.3	130.4	128.3	127.7	125.5
53°	135.4	127.7	127.7	125.3	124.9	122.8
53.5°	132.8	125.0	125.0	122.6	122.2	119.9
54°	130.1	122.2	122.3	119.9	119.3	117.2
54.5°	127.4	119.4	119.4	117.0	116.4	114.2
55°	124.6	116.7	116.5	114.2	113.6	111.5
55.5°	121.9	113.9	113.9	111.5	110.8	108.7
56°	119.2	111.2	111.0	108.6	107.9	105.8
56.5°	116.4	108.4	108.2	105.7	105.1	103.0
57°	113.6	105.5	105.4	102.9	102.3	100.2
57.5°	110.7	102.8	102.8	100.1	99.4	97.3
58°	107.9	100.0	99.8	97.2	96.6	94.4
58.5°	105.2	97.2	96.9	94.5	93.8	91.7
59°	102.4	94.5	94.2	91.6	90.8	88.9
59.5°	99.6	91.7	91.5	88.9	88.1	86.0
60°	96.7	89.0	88.6	86.0	85.4	83.2
60.5°	94.0	86.2	85.9	83.3	82.6	80.6
61°	91.1	83.5	83.1	80.5	79.9	77.8
61.5°	88.3	80.8	80.4	77.7	77.1	75.0
62°	85.6	78.1	77.7	75.0	74.4	72.3
62.5°	83.0	75.5	75.0	72.3	71.6	69.6
63°	80.2	72.8	72.3	69.7	69.0	67.1
63.5°	77.6	70.3	69.7	67.1	66.4	64.6
64°	74.7	67.6	67.1	64.7	63.9	61.9
64.5°	72.0	65.0	64.6	62.0	61.2	59.4
65°	69.6	62.6	62.1	59.4	58.6	56.8
65.5°	66.9	59.9	59.4	56.8	56.1	54.3
66°	64.4	57.5	56.9	54.4	53.6	51.8
66.5°	61.8	55.0	54.4	51.9	51.1	49.5
67°	59.2	52.6	52.0	49.6	48.7	47.0



TEST NUMBER: P522099

CATALOG NUMBER: RLLV6069SE010WHDM-3000K-UNIT

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	56.6	50.1	49.6	47.1	46.3	44.7
68°	54.2	47.8	47.4	44.7	44.0	42.4
68.5°	51.6	45.4	44.9	42.4	41.7	40.0
69°	49.2	43.1	42.5	40.0	39.5	37.8
69.5°	46.8	40.8	40.2	37.9	37.2	35.5
70°	44.5	38.6	37.9	35.5	35.0	33.5
70.5°	42.2	36.5	35.8	33.5	32.9	31.4
71°	39.9	34.3	33.7	31.4	30.8	29.3
71.5°	37.6	32.1	31.5	29.3	28.8	27.3
72°	35.2	30.1	29.5	27.3	26.8	25.3
72.5°	33.2	28.1	27.5	25.2	24.9	23.6
73°	31.1	26.4	25.6	23.6	23.1	21.8
73.5°	29.0	24.4	23.6	21.8	21.4	20.2
74°	27.0	22.5	21.7	20.1	19.6	18.5
74.5°	25.2	20.6	20.1	18.4	18.0	16.9
75°	23.2	18.9	18.3	16.8	16.5	15.4
75.5°	21.4	17.3	16.8	15.3	15.0	13.9
76°	19.6	15.7	15.3	13.9	13.5	12.6
76.5°	17.9	14.4	14.0	12.4	12.1	11.4
77°	16.3	13.0	12.5	11.2	11.0	10.4
77.5°	14.8	11.7	11.2	10.1	10.0	9.1
78°	13.4	10.5	10.1	8.9	8.7	8.2
78.5°	12.0	9.2	8.9	8.0	7.9	7.1
79°	10.6	8.2	8.0	7.1	6.9	6.5
79.5°	9.6	7.2	6.9	6.2	6.2	5.6
80°	8.7	6.5	6.1	5.5	5.4	5.3
80.5°	7.4	5.5	5.4	4.8	4.8	4.6
81°	6.7	5.0	4.7	4.3	4.3	4.1
81.5°	5.7	4.4	4.3	3.9	3.8	3.7
82°	5.4	3.9	3.8	3.6	3.6	3.3
82.5°	4.6	3.7	3.6	3.1	3.1	3.0
83°	4.0	3.1	3.0	2.8	2.8	2.7
83.5°	3.7	2.9	2.8	2.4	2.3	2.2
84°	3.4	2.6	2.2	2.1	2.1	2.1
84.5°	3.0	2.2	2.1	2.1	2.0	1.7
85°	2.7	2.1	2.0	1.6	1.6	1.3
85.5°	2.2	1.6	1.6	1.4	1.3	1.4
86°	2.0	1.3	1.2	1.5	1.3	0.6
86.5°	1.8	1.5	1.1	0.6	0.6	0.6
87°	1.4	0.6	0.6	0.6	0.5	0.5
87.5°	1.3	0.6	0.5	0.4	0.0	0.0
88°	0.7	0.4	0.0	0.0	0.0	0.0
88.5°	0.6	0.0	0.0	0.0	0.0	0.0
89°	0.5	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: P522099

CATALOG NUMBER: RLLV6069SE010WHDM-3000K-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)