

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: P895714

Luminaire Tested: **RAWZC409-6500K**

Issue Date: 11/14/2024

Tested By:

Approved By:



Cooper Lighting Solutions laboratories have been accredited by National Voluntary Laboratory Accreditation Program (NVLAP) that it adheres to the requirements of ISO/IEC 17025:2005 and appropriate IESNA test methods. This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government. Results contained in this report are valid for luminaire sample tested, as supplied by requestor. Information related to the luminaire tested has been supplied by requestor and can affect the validity of the test results. Report shall not be reproduced except in full without approval of Cooper Lighting Solutions Lighting Laboratory. Test performed at address noted above.

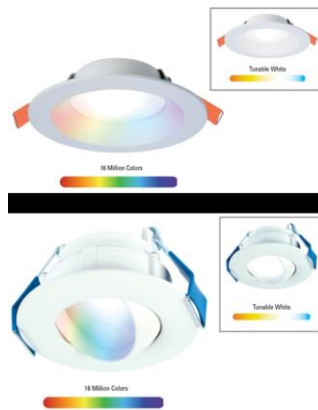
**Test Information**

Test Method: LM-79-08  
 Report Number: P895714  
 Test Lab:  
 Issue Date: 11/14/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: HALO  
 Catalog Number: RAWZC409-6500K  
 Description: 4IN ADJUSTABLE WiZ SELECTABLE CCT  
 Light Source: WiZ SELECTABLE 90CRI / 6500K CCT  
 Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
 Luminaire Lumens: 950.0 lumens  
 Efficiency: N/A  
 Efficacy: 91.3 lumens/watt  
 Spacing Criteria (0/90/45): 1.1 / 1.11 / 1.16  
 Luminous Opening: Circular (Dia: 0.33' x H: 0')  
 CIE Type: Direct

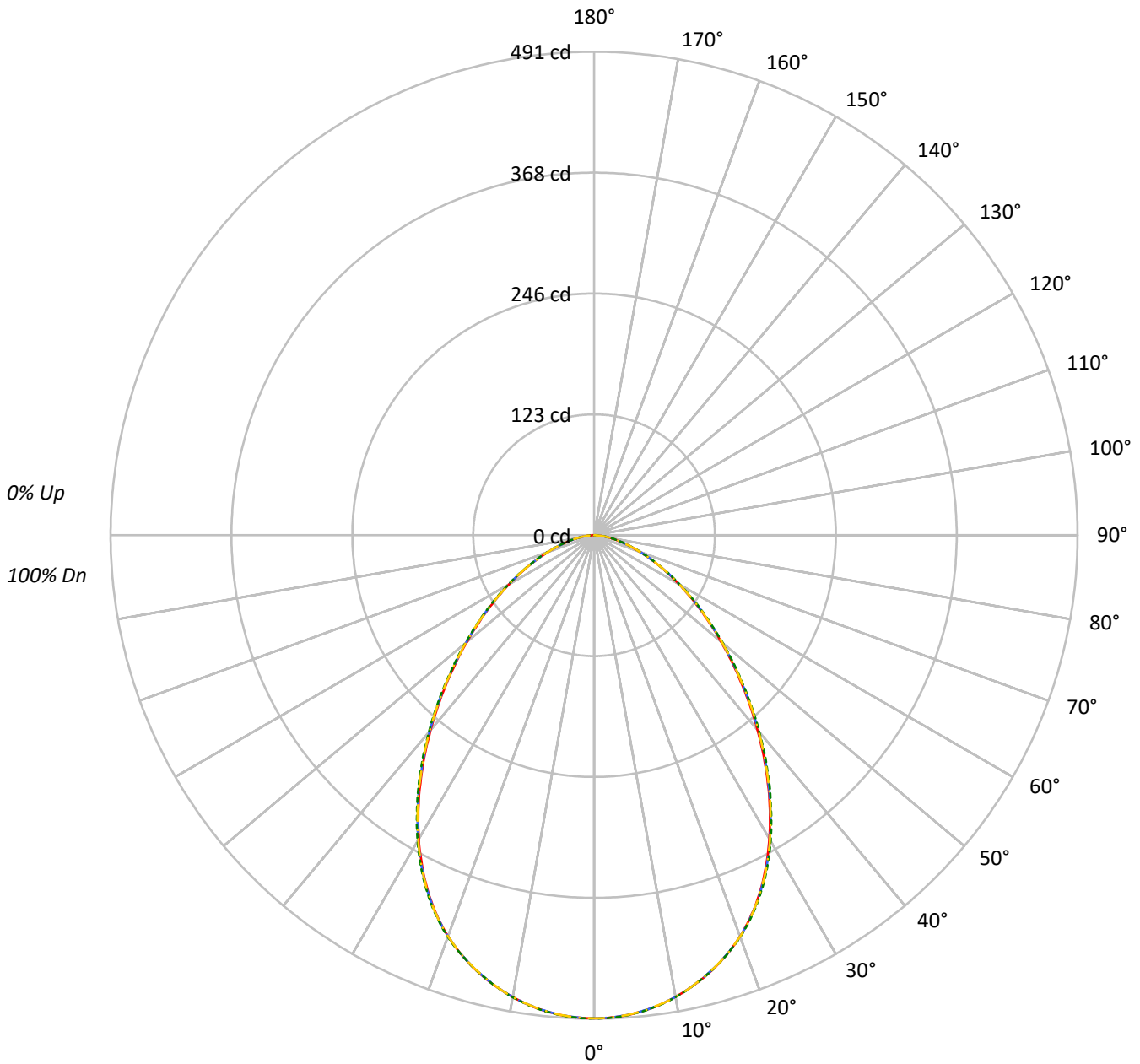
Input Watts (W): 10.4  
 Input Voltage (V): NR  
 Input Current (Ain): NR  
 Voltage Rise (V): NR  
 Power Factor: NR  
 Total Harmonic Distortion (THDi): NR  
 Frequency (hertz): 60  
 Stabilization Time: NR  
 Operation Time: NR  
 Ambient Temperature (°C): NR  
 Test Distance: 25 FT



Measurements		Calibration Due Date	
Instrument	Identification		
Photometer	GONIO 1 11111111	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021
Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021

TEST NUMBER: P895714  
CATALOG NUMBER: RAWZC409-6500K

### Luminous Intensity Polar Plot



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

TEST NUMBER: P895714  
 CATALOG NUMBER: RAWZC409-6500K

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

RF	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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100		
1	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87	87	87	87	87	87	87		
2	102	95	89	84	99	93	88	83	90	85	81	86	83	79	83	80	78	76	76	76	76	76	76	76		
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66	66	66	66	66	66	66		
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58	58	58	58	58	58	58		
5	81	69	61	55	79	68	60	55	66	59	54	64	58	54	62	57	53	51	51	51	51	51	51	51		
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46	46	46	46	46	46	46		
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41	41	41	41	41	41	41		
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37	37	37	37	37	37	37		
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34	34	34	34	34	34	34		
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31	31	31	31	31	31	31		

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

	0°	90°	180°	270°
0°	61742	61742	61742	61742
5°	61523	61561	61523	61561
10°	60854	60867	60854	60867
15°	59725	59712	59725	59712
20°	58057	58138	58057	58138
25°	55405	55627	55405	55627
30°	51734	52097	51734	52097
35°	47258	47719	47258	47719
40°	42435	42911	42435	42911
45°	37589	38070	37589	38070
50°	33029	33480	33029	33480
55°	28875	29270	28875	29270
60°	25120	25447	25120	25447
65°	21649	21917	21649	21917
70°	18288	18619	18288	18619
75°	15220	15706	15220	15706
80°	12683	13335	12683	13335
85°	10108	10397	10108	10397

TEST NUMBER: P895714  
 CATALOG NUMBER: RAWZC409-6500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.1	4.9
10°-20°	128.9	13.6
20°-30°	183.3	19.3
30°-40°	192.8	20.3
40°-50°	164.2	17.3
50°-60°	119.0	12.5
60°-70°	72.9	7.7
70°-80°	34.3	3.6
80°-90°	8.5	0.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
<b>0°-30°</b>	<b>358.3</b>	<b>37.7</b>
<b>0°-40°</b>	<b>551.1</b>	<b>58.0</b>
<b>0°-60°</b>	<b>834.3</b>	<b>87.8</b>
<b>0°-90°</b>	<b>950.0</b>	<b>100.0</b>
90°-120°	0.0	0.0
90°-150°	0.0	0.0
<b>90°-180°</b>	<b>0.0</b>	<b>0.0</b>
<b>0°-180°</b>	<b>950.0</b>	<b>100.0</b>

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	491	491	491	491	491	
5°	487	487	487	487	487	46
15°	458	458	458	458	458	129
25°	399	401	399	401	399	183
35°	308	311	308	311	308	192
45°	211	214	211	214	211	163
55°	132	133	132	133	132	118
65°	73	74	73	74	73	72
75°	31	32	31	32	31	34
85°	7	7	7	7	7	8
90°	0	0	0	0	0	

TEST NUMBER: P895714  
 CATALOG NUMBER: RAWZC409-6500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	490.6	490.6	490.6	490.6	490.6	490.6	490.6	490.6	490.6	490.6	490.6
0.5°	490.6	490.6	490.5	490.6	490.9	490.6	490.5	490.6	490.6	490.6	490.5
1°	490.6	490.5	490.5	490.5	490.6	490.5	490.5	490.5	490.6	490.5	490.5
1.5°	490.4	490.4	490.2	490.3	490.6	490.3	490.2	490.4	490.4	490.4	490.2
2°	490.1	490.1	490.0	490.1	490.4	490.1	490.0	490.1	490.1	490.1	490.0
2.5°	489.8	489.8	489.6	489.7	490.0	489.7	489.6	489.8	489.8	489.8	489.6
3°	489.4	489.4	489.3	489.4	489.7	489.4	489.3	489.4	489.4	489.4	489.3
3.5°	488.9	488.9	488.8	488.8	489.1	488.8	488.8	488.9	488.9	488.9	488.8
4°	488.4	488.3	488.3	488.3	488.7	488.3	488.3	488.3	488.4	488.3	488.3
4.5°	487.8	487.7	487.6	487.6	488.0	487.6	487.6	487.7	487.8	487.7	487.6
5°	487.0	487.0	486.9	486.9	487.3	486.9	486.9	487.0	487.0	487.0	486.9
5.5°	486.4	486.2	486.2	486.2	486.5	486.2	486.2	486.2	486.4	486.2	486.2
6°	485.5	485.4	485.3	485.4	485.7	485.4	485.3	485.4	485.5	485.4	485.3
6.5°	484.6	484.5	484.5	484.4	484.8	484.4	484.5	484.5	484.6	484.5	484.5
7°	483.6	483.6	483.5	483.4	483.8	483.4	483.5	483.6	483.6	483.6	483.5
7.5°	482.6	482.5	482.4	482.4	482.7	482.4	482.4	482.5	482.6	482.5	482.4
8°	481.6	481.5	481.3	481.4	481.7	481.4	481.3	481.5	481.6	481.5	481.3
8.5°	480.3	480.2	480.1	480.2	480.5	480.2	480.1	480.2	480.3	480.2	480.1
9°	479.0	478.9	478.9	478.8	479.2	478.8	478.9	478.9	479.0	478.9	478.9
9.5°	477.7	477.6	477.5	477.5	477.8	477.5	477.5	477.6	477.7	477.6	477.5
10°	476.2	476.1	476.0	476.1	476.3	476.1	476.0	476.1	476.2	476.1	476.0
10.5°	474.7	474.7	474.6	474.5	474.8	474.5	474.6	474.7	474.7	474.7	474.6
11°	473.3	473.2	473.1	473.0	473.3	473.0	473.1	473.2	473.3	473.2	473.1
11.5°	471.6	471.6	471.5	471.4	471.7	471.4	471.5	471.6	471.6	471.6	471.5
12°	469.9	469.9	469.7	469.6	469.8	469.6	469.7	469.9	469.9	469.9	469.7
12.5°	468.1	468.1	467.9	467.9	468.1	467.9	467.9	468.1	468.1	468.1	467.9
13°	466.4	466.3	466.1	466.0	466.2	466.0	466.1	466.3	466.4	466.3	466.1
13.5°	464.5	464.4	464.3	464.2	464.4	464.2	464.3	464.4	464.5	464.4	464.3
14°	462.6	462.5	462.3	462.2	462.4	462.2	462.3	462.5	462.6	462.5	462.3
14.5°	460.5	460.4	460.3	460.2	460.4	460.2	460.3	460.4	460.5	460.4	460.3
15°	458.4	458.3	458.2	458.1	458.3	458.1	458.2	458.3	458.4	458.3	458.2
15.5°	456.3	456.2	456.1	456.0	456.3	456.0	456.1	456.2	456.3	456.2	456.1
16°	454.2	454.0	453.8	453.8	454.1	453.8	453.8	454.0	454.2	454.0	453.8
16.5°	451.8	451.7	451.6	451.5	451.8	451.5	451.6	451.7	451.8	451.7	451.6
17°	449.2	449.4	449.2	449.2	449.4	449.2	449.2	449.4	449.2	449.4	449.2
17.5°	447.1	447.0	446.8	446.9	447.2	446.9	446.8	447.0	447.1	447.0	446.8
18°	444.5	444.5	444.3	444.3	444.7	444.3	444.3	444.5	444.5	444.5	444.3
18.5°	441.9	441.7	441.8	441.8	442.1	441.8	441.8	441.7	441.9	441.7	441.8
19°	439.2	439.2	439.1	439.2	439.6	439.2	439.1	439.2	439.2	439.2	439.1
19.5°	436.4	436.2	436.4	436.5	436.9	436.5	436.4	436.2	436.4	436.2	436.4
20°	433.5	433.5	433.5	433.7	434.1	433.7	433.5	433.5	433.5	433.5	433.5
20.5°	430.5	430.5	430.7	430.8	431.3	430.8	430.7	430.5	430.5	430.5	430.7
21°	427.3	427.4	427.5	427.7	428.1	427.7	427.5	427.4	427.3	427.4	427.5
21.5°	424.1	424.3	424.4	424.6	425.1	424.6	424.4	424.3	424.1	424.3	424.4
22°	421.0	421.0	421.3	421.5	421.9	421.5	421.3	421.0	421.0	421.0	421.3

TEST NUMBER: P895714  
 CATALOG NUMBER: RAWZC409-6500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	417.4	417.6	417.9	418.2	418.6	418.2	417.9	417.6	417.4	417.6	417.9
23°	414.1	414.2	414.5	414.7	415.1	414.7	414.5	414.2	414.1	414.2	414.5
23.5°	410.4	410.7	410.9	411.3	411.7	411.3	410.9	410.7	410.4	410.7	410.9
24°	406.7	406.9	407.3	407.6	408.1	407.6	407.3	406.9	406.7	406.9	407.3
24.5°	403.0	403.2	403.6	404.0	404.5	404.0	403.6	403.2	403.0	403.2	403.6
25°	399.0	399.2	399.6	400.1	400.6	400.1	399.6	399.2	399.0	399.2	399.6
25.5°	395.1	395.4	395.9	396.4	396.9	396.4	395.9	395.4	395.1	395.4	395.9
26°	391.1	391.3	391.8	392.3	392.8	392.3	391.8	391.3	391.1	391.3	391.8
26.5°	386.9	387.3	387.8	388.3	388.9	388.3	387.8	387.3	386.9	387.3	387.8
27°	382.6	383.0	383.6	384.1	384.8	384.1	383.6	383.0	382.6	383.0	383.6
27.5°	378.4	378.8	379.4	379.9	380.5	379.9	379.4	378.8	378.4	378.8	379.4
28°	374.0	374.4	375.1	375.7	376.2	375.7	375.1	374.4	374.0	374.4	375.1
28.5°	369.6	370.0	370.7	371.3	371.8	371.3	370.7	370.0	369.6	370.0	370.7
29°	365.1	365.5	366.2	366.9	367.5	366.9	366.2	365.5	365.1	365.5	366.2
29.5°	360.6	361.0	361.9	362.5	363.1	362.5	361.9	361.0	360.6	361.0	361.9
30°	356.0	356.4	357.1	357.8	358.5	357.8	357.1	356.4	356.0	356.4	357.1
30.5°	351.3	351.7	352.6	353.3	353.9	353.3	352.6	351.7	351.3	351.7	352.6
31°	346.6	347.1	347.9	348.6	349.2	348.6	347.9	347.1	346.6	347.1	347.9
31.5°	341.8	342.2	343.2	343.9	344.5	343.9	343.2	342.2	341.8	342.2	343.2
32°	337.0	337.5	338.4	339.2	339.7	339.2	338.4	337.5	337.0	337.5	338.4
32.5°	332.1	332.6	333.5	334.3	334.9	334.3	333.5	332.6	332.1	332.6	333.5
33°	327.4	327.8	328.8	329.6	330.1	329.6	328.8	327.8	327.4	327.8	328.8
33.5°	322.6	322.9	323.9	324.6	325.2	324.6	323.9	322.9	322.6	322.9	323.9
34°	317.6	317.9	319.0	319.8	320.5	319.8	319.0	317.9	317.6	317.9	319.0
34.5°	312.6	313.1	314.1	314.8	315.5	314.8	314.1	313.1	312.6	313.1	314.1
35°	307.6	308.1	309.1	309.9	310.6	309.9	309.1	308.1	307.6	308.1	309.1
35.5°	302.7	303.2	304.2	305.1	305.8	305.1	304.2	303.2	302.7	303.2	304.2
36°	297.7	298.1	299.2	300.0	300.6	300.0	299.2	298.1	297.7	298.1	299.2
36.5°	292.8	293.3	294.3	295.2	295.8	295.2	294.3	293.3	292.8	293.3	294.3
37°	287.8	288.3	289.3	290.1	290.7	290.1	289.3	288.3	287.8	288.3	289.3
37.5°	282.8	283.4	284.3	285.2	285.9	285.2	284.3	283.4	282.8	283.4	284.3
38°	277.9	278.4	279.5	280.3	280.9	280.3	279.5	278.4	277.9	278.4	279.5
38.5°	272.9	273.4	274.5	275.3	275.9	275.3	274.5	273.4	272.9	273.4	274.5
39°	268.0	268.6	269.7	270.5	271.1	270.5	269.7	268.6	268.0	268.6	269.7
39.5°	263.1	263.7	264.6	265.5	266.1	265.5	264.6	263.7	263.1	263.7	264.6
40°	258.3	258.7	259.8	260.6	261.2	260.6	259.8	258.7	258.3	258.7	259.8
40.5°	253.4	253.9	255.0	255.8	256.3	255.8	255.0	253.9	253.4	253.9	255.0
41°	248.5	249.0	250.0	250.9	251.5	250.9	250.0	249.0	248.5	249.0	250.0
41.5°	243.7	244.3	245.3	246.1	246.7	246.1	245.3	244.3	243.7	244.3	245.3
42°	238.9	239.4	240.5	241.2	241.8	241.2	240.5	239.4	238.9	239.4	240.5
42.5°	234.2	234.8	235.8	236.6	237.1	236.6	235.8	234.8	234.2	234.8	235.8
43°	229.6	230.1	231.0	231.8	232.3	231.8	231.0	230.1	229.6	230.1	231.0
43.5°	224.9	225.3	226.4	227.1	227.7	227.1	226.4	225.3	224.9	225.3	226.4
44°	220.3	220.8	221.8	222.4	223.0	222.4	221.8	220.8	220.3	220.8	221.8
44.5°	215.6	216.2	217.2	217.9	218.4	217.9	217.2	216.2	215.6	216.2	217.2

TEST NUMBER: P895714  
 CATALOG NUMBER: RAWZC409-6500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	211.2	211.7	212.7	213.4	213.9	213.4	212.7	211.7	211.2	211.7	212.7
45.5°	206.7	207.1	208.1	208.8	209.3	208.8	208.1	207.1	206.7	207.1	208.1
46°	202.3	202.8	203.7	204.4	205.0	204.4	203.7	202.8	202.3	202.8	203.7
46.5°	197.8	198.3	199.3	200.0	200.5	200.0	199.3	198.3	197.8	198.3	199.3
47°	193.6	193.9	194.9	195.6	196.1	195.6	194.9	193.9	193.6	193.9	194.9
47.5°	189.2	189.7	190.6	191.3	191.8	191.3	190.6	189.7	189.2	189.7	190.6
48°	185.1	185.5	186.4	187.0	187.5	187.0	186.4	185.5	185.1	185.5	186.4
48.5°	180.8	181.2	182.1	182.8	183.3	182.8	182.1	181.2	180.8	181.2	182.1
49°	176.8	177.2	178.1	178.7	179.2	178.7	178.1	177.2	176.8	177.2	178.1
49.5°	172.6	173.1	174.0	174.6	175.1	174.6	174.0	173.1	172.6	173.1	174.0
50°	168.7	169.1	170.0	170.6	171.0	170.6	170.0	169.1	168.7	169.1	170.0
50.5°	164.6	165.1	165.9	166.5	167.0	166.5	165.9	165.1	164.6	165.1	165.9
51°	160.8	161.2	162.0	162.7	163.1	162.7	162.0	161.2	160.8	161.2	162.0
51.5°	156.9	157.3	158.1	158.7	159.2	158.7	158.1	157.3	156.9	157.3	158.1
52°	153.2	153.6	154.3	155.0	155.4	155.0	154.3	153.6	153.2	153.6	154.3
52.5°	149.4	149.8	150.5	151.2	151.6	151.2	150.5	149.8	149.4	149.8	150.5
53°	145.7	146.2	146.8	147.3	147.8	147.3	146.8	146.2	145.7	146.2	146.8
53.5°	142.1	142.5	143.1	143.7	144.2	143.7	143.1	142.5	142.1	142.5	143.1
54°	138.5	138.8	139.4	140.0	140.5	140.0	139.4	138.8	138.5	138.8	139.4
54.5°	135.1	135.4	136.0	136.6	137.0	136.6	136.0	135.4	135.1	135.4	136.0
55°	131.6	131.9	132.5	133.0	133.4	133.0	132.5	131.9	131.6	131.9	132.5
55.5°	128.3	128.5	129.1	129.6	130.0	129.6	129.1	128.5	128.3	128.5	129.1
56°	124.8	125.1	125.6	126.2	126.6	126.2	125.6	125.1	124.8	125.1	125.6
56.5°	121.6	121.7	122.2	122.8	123.2	122.8	122.2	121.7	121.6	121.7	122.2
57°	118.3	118.5	119.0	119.5	119.9	119.5	119.0	118.5	118.3	118.5	119.0
57.5°	115.1	115.2	115.7	116.2	116.6	116.2	115.7	115.2	115.1	115.2	115.7
58°	112.0	112.1	112.6	113.1	113.4	113.1	112.6	112.1	112.0	112.1	112.6
58.5°	108.9	109.0	109.4	109.9	110.3	109.9	109.4	109.0	108.9	109.0	109.4
59°	105.7	105.9	106.3	106.8	107.1	106.8	106.3	105.9	105.7	105.9	106.3
59.5°	102.8	102.9	103.4	103.8	104.1	103.8	103.4	102.9	102.8	102.9	103.4
60°	99.8	99.9	100.3	100.7	101.1	100.7	100.3	99.9	99.8	99.9	100.3
60.5°	96.9	97.0	97.3	97.8	98.0	97.8	97.3	97.0	96.9	97.0	97.3
61°	94.1	94.1	94.5	94.9	95.2	94.9	94.5	94.1	94.1	94.1	94.5
61.5°	91.2	91.3	91.7	92.1	92.3	92.1	91.7	91.3	91.2	91.3	91.7
62°	88.4	88.5	88.9	89.2	89.5	89.2	88.9	88.5	88.4	88.5	88.9
62.5°	85.7	85.8	86.2	86.5	86.7	86.5	86.2	85.8	85.7	85.8	86.2
63°	83.0	83.1	83.4	83.7	84.0	83.7	83.4	83.1	83.0	83.1	83.4
63.5°	80.3	80.5	80.8	81.0	81.3	81.0	80.8	80.5	80.3	80.5	80.8
64°	77.8	77.9	78.2	78.5	78.7	78.5	78.2	77.9	77.8	77.9	78.2
64.5°	75.2	75.3	75.6	75.8	76.1	75.8	75.6	75.3	75.2	75.3	75.6
65°	72.7	72.8	73.0	73.3	73.6	73.3	73.0	72.8	72.7	72.8	73.0
65.5°	70.3	70.4	70.6	70.9	71.2	70.9	70.6	70.4	70.3	70.4	70.6
66°	67.8	67.9	68.2	68.4	68.7	68.4	68.2	67.9	67.8	67.9	68.2
66.5°	65.3	65.5	65.7	66.0	66.3	66.0	65.7	65.5	65.3	65.5	65.7
67°	62.9	63.1	63.4	63.6	63.9	63.6	63.4	63.1	62.9	63.1	63.4



TEST NUMBER: P895714  
 CATALOG NUMBER: RAWZC409-6500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	60.7	60.8	61.1	61.3	61.6	61.3	61.1	60.8	60.7	60.8	61.1
68°	58.4	58.6	58.8	59.0	59.3	59.0	58.8	58.6	58.4	58.6	58.8
68.5°	56.1	56.3	56.6	56.8	57.0	56.8	56.6	56.3	56.1	56.3	56.6
69°	54.0	54.2	54.5	54.5	54.8	54.5	54.5	54.2	54.0	54.2	54.5
69.5°	51.8	52.0	52.3	52.5	52.7	52.5	52.3	52.0	51.8	52.0	52.3
70°	49.7	49.9	50.2	50.4	50.6	50.4	50.2	49.9	49.7	49.9	50.2
70.5°	47.6	47.8	48.1	48.3	48.5	48.3	48.1	47.8	47.6	47.8	48.1
71°	45.7	45.9	46.1	46.2	46.5	46.2	46.1	45.9	45.7	45.9	46.1
71.5°	43.7	43.9	44.2	44.4	44.7	44.4	44.2	43.9	43.7	43.9	44.2
72°	41.8	42.0	42.3	42.5	42.8	42.5	42.3	42.0	41.8	42.0	42.3
72.5°	39.9	40.1	40.4	40.6	40.9	40.6	40.4	40.1	39.9	40.1	40.4
73°	38.1	38.3	38.6	38.8	39.0	38.8	38.6	38.3	38.1	38.3	38.6
73.5°	36.5	36.6	36.8	37.1	37.3	37.1	36.8	36.6	36.5	36.6	36.8
74°	34.7	34.8	35.1	35.3	35.6	35.3	35.1	34.8	34.7	34.8	35.1
74.5°	33.0	33.1	33.3	33.6	33.9	33.6	33.3	33.1	33.0	33.1	33.3
75°	31.3	31.4	31.7	32.0	32.3	32.0	31.7	31.4	31.3	31.4	31.7
75.5°	29.7	29.8	30.1	30.4	30.7	30.4	30.1	29.8	29.7	29.8	30.1
76°	28.2	28.3	28.7	29.0	29.3	29.0	28.7	28.3	28.2	28.3	28.7
76.5°	26.7	26.8	27.2	27.5	27.8	27.5	27.2	26.8	26.7	26.8	27.2
77°	25.2	25.3	25.7	26.1	26.4	26.1	25.7	25.3	25.2	25.3	25.7
77.5°	23.8	23.9	24.4	24.8	25.1	24.8	24.4	23.9	23.8	23.9	24.4
78°	22.4	22.5	23.0	23.5	23.7	23.5	23.0	22.5	22.4	22.5	23.0
78.5°	21.0	21.2	21.7	22.1	22.4	22.1	21.7	21.2	21.0	21.2	21.7
79°	19.9	20.1	20.5	20.9	21.0	20.9	20.5	20.1	19.9	20.1	20.5
79.5°	18.7	18.9	19.2	19.5	19.8	19.5	19.2	18.9	18.7	18.9	19.2
80°	17.5	17.7	18.0	18.3	18.4	18.3	18.0	17.7	17.5	17.7	18.0
80.5°	16.4	16.6	16.8	17.0	17.2	17.0	16.8	16.6	16.4	16.6	16.8
81°	15.4	15.5	15.6	15.8	15.9	15.8	15.6	15.5	15.4	15.5	15.6
81.5°	14.4	14.4	14.4	14.5	14.7	14.5	14.4	14.4	14.4	14.4	14.4
82°	13.3	13.2	13.3	13.4	13.5	13.4	13.3	13.2	13.3	13.2	13.3
82.5°	12.3	12.3	12.3	12.4	12.5	12.4	12.3	12.3	12.3	12.3	12.3
83°	11.2	11.2	11.2	11.3	11.4	11.3	11.2	11.2	11.2	11.2	11.2
83.5°	10.2	10.2	10.2	10.2	10.3	10.2	10.2	10.2	10.2	10.2	10.2
84°	9.1	9.1	9.1	9.2	9.2	9.2	9.1	9.1	9.1	9.1	9.1
84.5°	8.1	8.1	8.1	8.2	8.2	8.2	8.1	8.1	8.1	8.1	8.1
85°	7.0	7.1	7.1	7.2	7.2	7.2	7.1	7.1	7.0	7.1	7.1
85.5°	6.0	6.1	6.1	6.2	6.3	6.2	6.1	6.1	6.0	6.1	6.1
86°	5.1	5.1	5.1	5.2	5.3	5.2	5.1	5.1	5.1	5.1	5.1
86.5°	4.2	4.2	4.3	4.4	4.6	4.4	4.3	4.2	4.2	4.2	4.3
87°	3.3	3.4	3.6	3.8	4.2	3.8	3.6	3.4	3.3	3.4	3.6
87.5°	2.4	2.7	2.9	3.3	3.6	3.3	2.9	2.7	2.4	2.7	2.9
88°	1.8	2.0	2.3	2.8	3.1	2.8	2.3	2.0	1.8	2.0	2.3
88.5°	1.2	1.3	1.8	2.3	2.6	2.3	1.8	1.3	1.2	1.3	1.8
89°	0.8	0.9	1.4	1.8	2.1	1.8	1.4	0.9	0.8	0.9	1.4
89.5°	0.3	0.6	0.9	1.4	1.6	1.4	0.9	0.6	0.3	0.6	0.9

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



TEST NUMBER: P895714  
CATALOG NUMBER: RAWZC409-6500K

**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	0.0	0.0	0.0

TEST NUMBER: P895714

CATALOG NUMBER: RAWZC409-6500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	490.6	490.6	490.6	490.6	490.6	490.6
0.5°	490.6	490.9	490.6	490.5	490.6	490.6
1°	490.5	490.6	490.5	490.5	490.5	490.6
1.5°	490.3	490.6	490.3	490.2	490.4	490.4
2°	490.1	490.4	490.1	490.0	490.1	490.1
2.5°	489.7	490.0	489.7	489.6	489.8	489.8
3°	489.4	489.7	489.4	489.3	489.4	489.4
3.5°	488.8	489.1	488.8	488.8	488.9	488.9
4°	488.3	488.7	488.3	488.3	488.3	488.4
4.5°	487.6	488.0	487.6	487.6	487.7	487.8
5°	486.9	487.3	486.9	486.9	487.0	487.0
5.5°	486.2	486.5	486.2	486.2	486.2	486.4
6°	485.4	485.7	485.4	485.3	485.4	485.5
6.5°	484.4	484.8	484.4	484.5	484.5	484.6
7°	483.4	483.8	483.4	483.5	483.6	483.6
7.5°	482.4	482.7	482.4	482.4	482.5	482.6
8°	481.4	481.7	481.4	481.3	481.5	481.6
8.5°	480.2	480.5	480.2	480.1	480.2	480.3
9°	478.8	479.2	478.8	478.9	478.9	479.0
9.5°	477.5	477.8	477.5	477.5	477.6	477.7
10°	476.1	476.3	476.1	476.0	476.1	476.2
10.5°	474.5	474.8	474.5	474.6	474.7	474.7
11°	473.0	473.3	473.0	473.1	473.2	473.3
11.5°	471.4	471.7	471.4	471.5	471.6	471.6
12°	469.6	469.8	469.6	469.7	469.9	469.9
12.5°	467.9	468.1	467.9	467.9	468.1	468.1
13°	466.0	466.2	466.0	466.1	466.3	466.4
13.5°	464.2	464.4	464.2	464.3	464.4	464.5
14°	462.2	462.4	462.2	462.3	462.5	462.6
14.5°	460.2	460.4	460.2	460.3	460.4	460.5
15°	458.1	458.3	458.1	458.2	458.3	458.4
15.5°	456.0	456.3	456.0	456.1	456.2	456.3
16°	453.8	454.1	453.8	453.8	454.0	454.2
16.5°	451.5	451.8	451.5	451.6	451.7	451.8
17°	449.2	449.4	449.2	449.2	449.4	449.2
17.5°	446.9	447.2	446.9	446.8	447.0	447.1
18°	444.3	444.7	444.3	444.3	444.5	444.5
18.5°	441.8	442.1	441.8	441.8	441.7	441.9
19°	439.2	439.6	439.2	439.1	439.2	439.2
19.5°	436.5	436.9	436.5	436.4	436.2	436.4
20°	433.7	434.1	433.7	433.5	433.5	433.5
20.5°	430.8	431.3	430.8	430.7	430.5	430.5
21°	427.7	428.1	427.7	427.5	427.4	427.3
21.5°	424.6	425.1	424.6	424.4	424.3	424.1
22°	421.5	421.9	421.5	421.3	421.0	421.0

TEST NUMBER: P895714  
 CATALOG NUMBER: RAWZC409-6500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	418.2	418.6	418.2	417.9	417.6	417.4
23°	414.7	415.1	414.7	414.5	414.2	414.1
23.5°	411.3	411.7	411.3	410.9	410.7	410.4
24°	407.6	408.1	407.6	407.3	406.9	406.7
24.5°	404.0	404.5	404.0	403.6	403.2	403.0
25°	400.1	400.6	400.1	399.6	399.2	399.0
25.5°	396.4	396.9	396.4	395.9	395.4	395.1
26°	392.3	392.8	392.3	391.8	391.3	391.1
26.5°	388.3	388.9	388.3	387.8	387.3	386.9
27°	384.1	384.8	384.1	383.6	383.0	382.6
27.5°	379.9	380.5	379.9	379.4	378.8	378.4
28°	375.7	376.2	375.7	375.1	374.4	374.0
28.5°	371.3	371.8	371.3	370.7	370.0	369.6
29°	366.9	367.5	366.9	366.2	365.5	365.1
29.5°	362.5	363.1	362.5	361.9	361.0	360.6
30°	357.8	358.5	357.8	357.1	356.4	356.0
30.5°	353.3	353.9	353.3	352.6	351.7	351.3
31°	348.6	349.2	348.6	347.9	347.1	346.6
31.5°	343.9	344.5	343.9	343.2	342.2	341.8
32°	339.2	339.7	339.2	338.4	337.5	337.0
32.5°	334.3	334.9	334.3	333.5	332.6	332.1
33°	329.6	330.1	329.6	328.8	327.8	327.4
33.5°	324.6	325.2	324.6	323.9	322.9	322.6
34°	319.8	320.5	319.8	319.0	317.9	317.6
34.5°	314.8	315.5	314.8	314.1	313.1	312.6
35°	309.9	310.6	309.9	309.1	308.1	307.6
35.5°	305.1	305.8	305.1	304.2	303.2	302.7
36°	300.0	300.6	300.0	299.2	298.1	297.7
36.5°	295.2	295.8	295.2	294.3	293.3	292.8
37°	290.1	290.7	290.1	289.3	288.3	287.8
37.5°	285.2	285.9	285.2	284.3	283.4	282.8
38°	280.3	280.9	280.3	279.5	278.4	277.9
38.5°	275.3	275.9	275.3	274.5	273.4	272.9
39°	270.5	271.1	270.5	269.7	268.6	268.0
39.5°	265.5	266.1	265.5	264.6	263.7	263.1
40°	260.6	261.2	260.6	259.8	258.7	258.3
40.5°	255.8	256.3	255.8	255.0	253.9	253.4
41°	250.9	251.5	250.9	250.0	249.0	248.5
41.5°	246.1	246.7	246.1	245.3	244.3	243.7
42°	241.2	241.8	241.2	240.5	239.4	238.9
42.5°	236.6	237.1	236.6	235.8	234.8	234.2
43°	231.8	232.3	231.8	231.0	230.1	229.6
43.5°	227.1	227.7	227.1	226.4	225.3	224.9
44°	222.4	223.0	222.4	221.8	220.8	220.3
44.5°	217.9	218.4	217.9	217.2	216.2	215.6

TEST NUMBER: P895714  
 CATALOG NUMBER: RAWZC409-6500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	213.4	213.9	213.4	212.7	211.7	211.2
45.5°	208.8	209.3	208.8	208.1	207.1	206.7
46°	204.4	205.0	204.4	203.7	202.8	202.3
46.5°	200.0	200.5	200.0	199.3	198.3	197.8
47°	195.6	196.1	195.6	194.9	193.9	193.6
47.5°	191.3	191.8	191.3	190.6	189.7	189.2
48°	187.0	187.5	187.0	186.4	185.5	185.1
48.5°	182.8	183.3	182.8	182.1	181.2	180.8
49°	178.7	179.2	178.7	178.1	177.2	176.8
49.5°	174.6	175.1	174.6	174.0	173.1	172.6
50°	170.6	171.0	170.6	170.0	169.1	168.7
50.5°	166.5	167.0	166.5	165.9	165.1	164.6
51°	162.7	163.1	162.7	162.0	161.2	160.8
51.5°	158.7	159.2	158.7	158.1	157.3	156.9
52°	155.0	155.4	155.0	154.3	153.6	153.2
52.5°	151.2	151.6	151.2	150.5	149.8	149.4
53°	147.3	147.8	147.3	146.8	146.2	145.7
53.5°	143.7	144.2	143.7	143.1	142.5	142.1
54°	140.0	140.5	140.0	139.4	138.8	138.5
54.5°	136.6	137.0	136.6	136.0	135.4	135.1
55°	133.0	133.4	133.0	132.5	131.9	131.6
55.5°	129.6	130.0	129.6	129.1	128.5	128.3
56°	126.2	126.6	126.2	125.6	125.1	124.8
56.5°	122.8	123.2	122.8	122.2	121.7	121.6
57°	119.5	119.9	119.5	119.0	118.5	118.3
57.5°	116.2	116.6	116.2	115.7	115.2	115.1
58°	113.1	113.4	113.1	112.6	112.1	112.0
58.5°	109.9	110.3	109.9	109.4	109.0	108.9
59°	106.8	107.1	106.8	106.3	105.9	105.7
59.5°	103.8	104.1	103.8	103.4	102.9	102.8
60°	100.7	101.1	100.7	100.3	99.9	99.8
60.5°	97.8	98.0	97.8	97.3	97.0	96.9
61°	94.9	95.2	94.9	94.5	94.1	94.1
61.5°	92.1	92.3	92.1	91.7	91.3	91.2
62°	89.2	89.5	89.2	88.9	88.5	88.4
62.5°	86.5	86.7	86.5	86.2	85.8	85.7
63°	83.7	84.0	83.7	83.4	83.1	83.0
63.5°	81.0	81.3	81.0	80.8	80.5	80.3
64°	78.5	78.7	78.5	78.2	77.9	77.8
64.5°	75.8	76.1	75.8	75.6	75.3	75.2
65°	73.3	73.6	73.3	73.0	72.8	72.7
65.5°	70.9	71.2	70.9	70.6	70.4	70.3
66°	68.4	68.7	68.4	68.2	67.9	67.8
66.5°	66.0	66.3	66.0	65.7	65.5	65.3
67°	63.6	63.9	63.6	63.4	63.1	62.9

TEST NUMBER: P895714  
 CATALOG NUMBER: RAWZC409-6500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	61.3	61.6	61.3	61.1	60.8	60.7
68°	59.0	59.3	59.0	58.8	58.6	58.4
68.5°	56.8	57.0	56.8	56.6	56.3	56.1
69°	54.5	54.8	54.5	54.5	54.2	54.0
69.5°	52.5	52.7	52.5	52.3	52.0	51.8
70°	50.4	50.6	50.4	50.2	49.9	49.7
70.5°	48.3	48.5	48.3	48.1	47.8	47.6
71°	46.2	46.5	46.2	46.1	45.9	45.7
71.5°	44.4	44.7	44.4	44.2	43.9	43.7
72°	42.5	42.8	42.5	42.3	42.0	41.8
72.5°	40.6	40.9	40.6	40.4	40.1	39.9
73°	38.8	39.0	38.8	38.6	38.3	38.1
73.5°	37.1	37.3	37.1	36.8	36.6	36.5
74°	35.3	35.6	35.3	35.1	34.8	34.7
74.5°	33.6	33.9	33.6	33.3	33.1	33.0
75°	32.0	32.3	32.0	31.7	31.4	31.3
75.5°	30.4	30.7	30.4	30.1	29.8	29.7
76°	29.0	29.3	29.0	28.7	28.3	28.2
76.5°	27.5	27.8	27.5	27.2	26.8	26.7
77°	26.1	26.4	26.1	25.7	25.3	25.2
77.5°	24.8	25.1	24.8	24.4	23.9	23.8
78°	23.5	23.7	23.5	23.0	22.5	22.4
78.5°	22.1	22.4	22.1	21.7	21.2	21.0
79°	20.9	21.0	20.9	20.5	20.1	19.9
79.5°	19.5	19.8	19.5	19.2	18.9	18.7
80°	18.3	18.4	18.3	18.0	17.7	17.5
80.5°	17.0	17.2	17.0	16.8	16.6	16.4
81°	15.8	15.9	15.8	15.6	15.5	15.4
81.5°	14.5	14.7	14.5	14.4	14.4	14.4
82°	13.4	13.5	13.4	13.3	13.2	13.3
82.5°	12.4	12.5	12.4	12.3	12.3	12.3
83°	11.3	11.4	11.3	11.2	11.2	11.2
83.5°	10.2	10.3	10.2	10.2	10.2	10.2
84°	9.2	9.2	9.2	9.1	9.1	9.1
84.5°	8.2	8.2	8.2	8.1	8.1	8.1
85°	7.2	7.2	7.2	7.1	7.1	7.0
85.5°	6.2	6.3	6.2	6.1	6.1	6.0
86°	5.2	5.3	5.2	5.1	5.1	5.1
86.5°	4.4	4.6	4.4	4.3	4.2	4.2
87°	3.8	4.2	3.8	3.6	3.4	3.3
87.5°	3.3	3.6	3.3	2.9	2.7	2.4
88°	2.8	3.1	2.8	2.3	2.0	1.8
88.5°	2.3	2.6	2.3	1.8	1.3	1.2
89°	1.8	2.1	1.8	1.4	0.9	0.8
89.5°	1.4	1.6	1.4	0.9	0.6	0.3

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

  
NVLAP Lab Code: 200050-0



TEST NUMBER: P895714  
CATALOG NUMBER: RAWZC409-6500K

**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)