

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: P1431943

Luminaire Tested: **HSLUNVMW-3000K**

Issue Date: 3/16/2026



Test Information

Test Method: LM-79-08
Report Number: P1431943
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (UTU2511015E-A)
Test Lab: INNOVATION CENTER
Issue Date: 3/16/2026
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HSLUNVMW-3000K
Description: Marker - Low Diff (Default)

Light Source:
Ballast/Driver: ELECTRONIC DRIVER

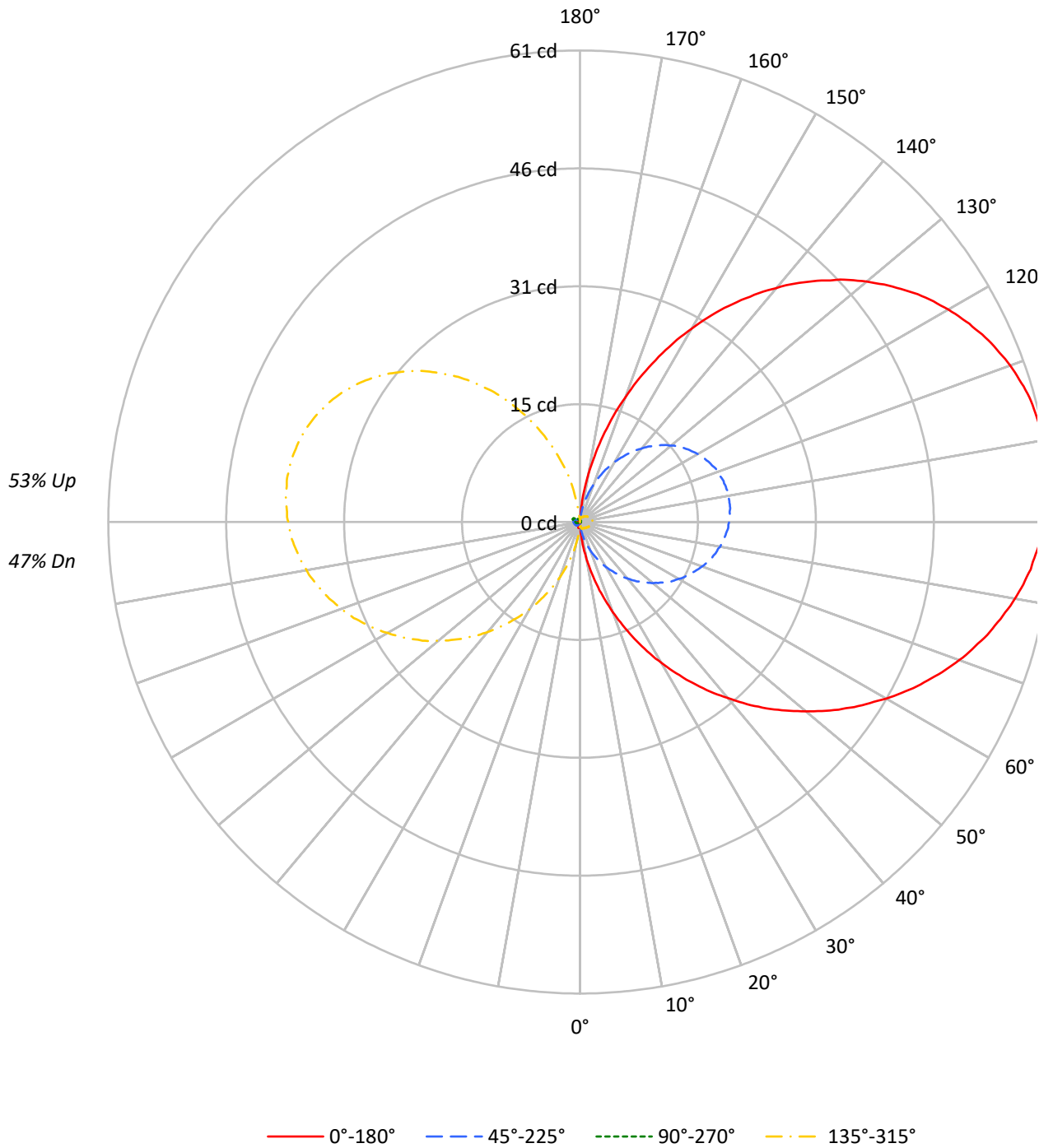
Summary

Lumens per Lamp: 155.9 (1 lamp)
Luminaire Lumens: 150.0 lumens
Efficiency: 96.2%
Efficacy: 39.5 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.27' x L: 0.43' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 3.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: >0.9
Total Harmonic Distortion (THDi): <20
Frequency (hertz): 60
Stabilization Time: HR
Operation Time: HR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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CATALOG NUMBER: HSLUNVMW-3000K

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20		
RC	80				70				50			30			10		
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0°	102	102	102	102	94	94	94	94	78	78	78	64	64	64	51	51	51
1°	88	81	75	70	80	74	69	64	60	56	53	48	45	42	36	34	32
2°	78	68	60	53	70	62	54	48	50	44	39	39	35	31	29	26	23
3°	70	58	49	42	63	52	44	38	42	36	31	33	28	24	24	20	17
4°	63	50	41	34	57	45	37	31	36	30	25	28	23	19	20	16	13
5°	57	44	35	28	51	40	31	25	32	25	20	25	19	15	18	14	11
6°	52	39	30	23	47	35	27	21	28	22	17	22	17	13	16	12	9
7°	48	35	26	20	43	31	24	18	25	19	14	19	15	11	14	10	7
8°	44	31	23	17	40	28	21	15	23	17	12	18	13	9	13	9	6
9°	41	28	20	15	37	26	18	13	21	15	11	16	11	8	12	8	5
10°	38	26	18	13	35	23	16	12	19	13	9	15	10	7	11	7	5

110°

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	0	0	0	0
5°	167	0	9	0
10°	452	0	75	0
15°	796	0	67	0
20°	1223	0	59	0
25°	1708	0	61	0
30°	2247	0	54	0
35°	2874	0	57	11
40°	3593	0	60	12
45°	4469	0	52	13
50°	5493	0	43	29
55°	6786	0	32	32
60°	8470	0	37	56
65°	10767	0	66	66
70°	14144	0	81	108
75°	19657	36	107	143
80°	30473	53	160	267
85°	62522	106	319	532



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ZONAL LUMENS:					CANDELA DISTRIBUTION:					
20	Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°
0	0°-10°	0.1	0.0	0.0	0°	0	0	0	0	0
0	10°-20°	0.7	0.5	0.5	5°	2	0	0	0	2
	20°-30°	2.1	1.4	1.4	15°	8	0	1	0	8
45	30°-40°	4.3	2.9	2.8	25°	17	0	1	0	17
26	40°-50°	7.1	4.7	4.5	35°	25	0	0	0	25
18	50°-60°	10.0	6.7	6.4	45°	34	0	0	0	34
13	60°-70°	13.0	8.6	8.3	55°	42	0	0	0	42
9	70°-80°	15.4	10.3	9.9	65°	49	0	0	0	49
7	80°-90°	17.0	11.4	10.9	75°	55	0	0	0	55
6	90°-100°	17.6	11.7	11.3	85°	59	0	0	0	59
5	100°-110°	16.9	11.3	10.8	90°	60	0	0	1	60
4	110°-120°	15.0	10.0	9.6	95°	61	0	0	1	61
3	120°-130°	12.3	8.2	7.9	105°	60	0	0	1	60
3	130°-140°	9.0	6.0	5.8	115°	57	0	0	1	57
	140°-150°	5.7	3.8	3.6	125°	52	0	0	1	52
	150°-160°	2.8	1.9	1.8	135°	44	0	0	1	44
	160°-170°	0.9	0.6	0.6	145°	34	0	0	0	34
	170°-180°	0.1	0.0	0.0	155°	23	0	0	0	23
	0°-30°	2.9	2.0	1.9	165°	12	0	0	0	12
	0°-40°	7.3	4.8	4.7	175°	2	0	0	0	2
	0°-60°	24.4	16.3	15.6	180°	0	0	0	0	0
	0°-90°	69.8	46.5	44.8						
	90°-120°	49.5	33.0	31.8						
	90°-150°	76.4	50.9	49.0						
	90°-180°	80.0	53.3	51.3						
	0°-180°	150.0	100.0	96.2						



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CANDELA DISTRIBUTION (FULL):

Flux		0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°
	0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0	1°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	2°	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	3°	0.7	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
16	4°	1.2	0.8	0.4	0.1	0.0	0.1	0.1	0.1	0.1	0.0
26	5°	1.8	1.1	0.5	0.1	0.0	0.1	0.1	0.1	0.1	0.0
38	6°	2.3	1.4	0.7	0.2	0.0	0.1	0.1	0.1	0.2	0.1
49	7°	2.9	1.7	0.9	0.2	0.0	0.1	0.1	0.3	0.5	0.2
58	8°	3.5	2.1	1.1	0.3	0.0	0.2	0.2	0.6	0.6	0.4
48	9°	4.1	2.5	1.3	0.4	0.0	0.2	0.3	0.7	0.8	0.5
33	10°	4.8	2.9	1.5	0.4	0.0	0.3	0.5	0.8	0.8	0.5
50	11°	5.4	3.3	1.7	0.5	0.0	0.3	0.6	0.9	0.8	0.6
64	12°	6.1	3.7	1.9	0.6	0.0	0.4	0.8	0.9	0.8	0.6
57	13°	6.9	4.1	2.2	0.6	0.0	0.5	0.8	0.9	0.8	0.6
47	14°	7.6	4.6	2.4	0.7	0.0	0.6	0.9	0.8	0.8	0.6
34	15°	8.3	5.1	2.6	0.8	0.0	0.7	0.9	0.8	0.7	0.6
22	16°	9.2	5.5	2.9	0.9	0.0	0.9	0.9	0.8	0.7	0.5
11	17°	9.9	6.0	3.1	0.9	0.0	1.1	0.9	0.8	0.7	0.5
3	18°	10.7	6.5	3.4	1.0	0.0	1.3	0.9	0.8	0.7	0.5
0	19°	11.5	7.0	3.6	1.1	0.0	1.5	0.9	0.8	0.7	0.5
	20°	12.4	7.5	3.9	1.2	0.0	1.6	0.9	0.8	0.6	0.5
	21°	13.2	8.0	4.2	1.2	0.0	1.8	0.9	0.7	0.6	0.5
	22°	14.0	8.5	4.4	1.3	0.0	1.9	0.9	0.7	0.6	0.5
	23°	14.9	9.0	4.7	1.4	0.0	2.0	0.9	0.7	0.6	0.5
	24°	15.8	9.5	5.0	1.5	0.0	2.2	0.9	0.7	0.6	0.5
	25°	16.7	10.0	5.3	1.5	0.0	2.2	0.9	0.7	0.6	0.5
	26°	17.5	10.6	5.5	1.6	0.0	2.3	0.9	0.7	0.6	0.5
	27°	18.4	11.1	5.8	1.7	0.0	2.3	0.9	0.7	0.6	0.5
	28°	19.3	11.6	6.1	1.8	0.0	2.4	0.9	0.7	0.6	0.5
	29°	20.2	12.2	6.4	1.9	0.0	2.4	0.9	0.7	0.5	0.5
	30°	21.0	12.7	6.7	2.0	0.0	2.4	0.9	0.7	0.5	0.5
	31°	21.9	13.3	7.0	2.0	0.0	2.5	0.9	0.7	0.5	0.5
	32°	22.8	13.8	7.3	2.1	0.0	2.5	0.9	0.7	0.5	0.5
	33°	23.6	14.3	7.5	2.2	0.0	2.5	0.9	0.7	0.5	0.5
	34°	24.6	14.9	7.8	2.3	0.0	2.5	1.0	0.7	0.5	0.5
	35°	25.4	15.4	8.1	2.4	0.0	2.6	1.0	0.7	0.5	0.5
	36°	26.3	15.9	8.4	2.5	0.0	2.6	1.0	0.7	0.5	0.5
	37°	27.2	16.5	8.7	2.5	0.0	2.6	1.0	0.7	0.5	0.5
	38°	28.1	17.0	9.0	2.6	0.0	2.7	1.0	0.7	0.5	0.5
	39°	28.9	17.5	9.3	2.7	0.0	2.7	1.0	0.6	0.5	0.5
	40°	29.7	18.0	9.5	2.8	0.0	2.8	1.0	0.7	0.5	0.5
	41°	30.6	18.5	9.8	2.9	0.0	2.8	1.0	0.7	0.5	0.5
	42°	31.5	19.1	10.1	3.0	0.0	2.8	1.0	0.7	0.5	0.5
	43°	32.4	19.6	10.4	3.1	0.0	2.8	1.0	0.7	0.4	0.5
	44°	33.2	20.1	10.7	3.1	0.0	2.9	1.0	0.7	0.4	0.5



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CANDELA DISTRIBUTION (continued):

225°	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	
0.0	45°	34.1	20.6	10.9	3.2	0.0	2.9	1.0	0.6	0.4	0.5
0.0	46°	34.9	21.1	11.2	3.3	0.0	3.0	1.1	0.6	0.4	0.5
0.0	47°	35.7	21.6	11.5	3.4	0.0	3.0	1.1	0.6	0.3	0.4
0.0	48°	36.5	22.1	11.7	3.5	0.0	3.0	1.1	0.6	0.3	0.4
0.0	49°	37.3	22.6	12.0	3.5	0.0	3.1	1.1	0.6	0.3	0.4
0.0	50°	38.1	23.1	12.3	3.6	0.0	3.1	1.1	0.6	0.3	0.4
0.0	51°	38.9	23.6	12.5	3.7	0.0	3.2	1.1	0.6	0.3	0.4
0.1	52°	39.7	24.1	12.8	3.8	0.0	3.2	1.1	0.6	0.3	0.4
0.1	53°	40.5	24.5	13.0	3.9	0.0	3.2	1.1	0.6	0.3	0.4
0.2	54°	41.3	25.0	13.3	3.9	0.0	3.3	1.2	0.6	0.3	0.4
0.3	55°	42.0	25.4	13.6	4.0	0.0	3.3	1.2	0.6	0.2	0.5
0.4	56°	42.8	25.9	13.8	4.1	0.0	3.4	1.2	0.6	0.3	0.5
0.4	57°	43.5	26.4	14.1	4.1	0.0	3.4	1.2	0.6	0.2	0.5
0.5	58°	44.2	26.8	14.3	4.2	0.0	3.5	1.2	0.6	0.2	0.5
0.5	59°	44.9	27.2	14.5	4.3	0.0	3.5	1.2	0.6	0.2	0.5
0.5	60°	45.7	27.7	14.7	4.4	0.0	3.5	1.2	0.6	0.2	0.5
0.5	61°	46.4	28.1	15.0	4.4	0.0	3.6	1.3	0.6	0.3	0.5
0.5	62°	47.1	28.5	15.2	4.5	0.0	3.6	1.3	0.6	0.3	0.5
0.5	63°	47.8	28.9	15.4	4.6	0.0	3.7	1.3	0.6	0.2	0.5
0.5	64°	48.5	29.3	15.6	4.6	0.0	3.7	1.3	0.6	0.3	0.5
0.5	65°	49.1	29.7	15.8	4.7	0.0	3.8	1.3	0.6	0.3	0.5
0.5	66°	49.7	30.1	16.0	4.8	0.0	3.8	1.3	0.6	0.3	0.5
0.5	67°	50.4	30.5	16.2	4.8	0.1	3.8	1.3	0.7	0.3	0.5
0.5	68°	51.0	30.8	16.4	4.9	0.0	3.9	1.4	0.7	0.3	0.5
0.5	69°	51.6	31.2	16.6	4.9	0.0	3.9	1.4	0.7	0.3	0.5
0.5	70°	52.2	31.6	16.8	5.0	0.0	4.0	1.4	0.7	0.3	0.5
0.5	71°	52.8	31.9	17.0	5.0	0.1	4.0	1.4	0.7	0.3	0.5
0.5	72°	53.3	32.2	17.2	5.1	0.0	4.1	1.4	0.7	0.3	0.5
0.5	73°	53.8	32.5	17.3	5.1	0.0	4.1	1.4	0.7	0.3	0.5
0.5	74°	54.4	32.9	17.5	5.2	0.1	4.1	1.4	0.7	0.3	0.5
0.5	75°	54.9	33.2	17.7	5.2	0.1	4.2	1.4	0.7	0.3	0.5
0.5	76°	55.3	33.4	17.8	5.3	0.1	4.2	1.5	0.7	0.3	0.5
0.5	77°	55.8	33.7	18.0	5.3	0.0	4.3	1.5	0.7	0.3	0.5
0.5	78°	56.2	34.0	18.1	5.4	0.1	4.3	1.5	0.7	0.3	0.5
0.5	79°	56.7	34.3	18.2	5.4	0.1	4.3	1.5	0.7	0.3	0.5
0.5	80°	57.1	34.5	18.4	5.4	0.1	4.4	1.5	0.7	0.3	0.5
0.5	81°	57.5	34.7	18.5	5.5	0.0	4.4	1.5	0.7	0.3	0.5
0.5	82°	57.9	35.0	18.6	5.5	0.0	4.5	1.5	0.7	0.3	0.5
0.5	83°	58.2	35.2	18.7	5.5	0.1	4.5	1.5	0.8	0.3	0.5
0.5	84°	58.6	35.4	18.8	5.6	0.1	4.6	1.5	0.8	0.3	0.5
0.5	85°	58.8	35.6	18.9	5.6	0.1	4.6	1.6	0.8	0.3	0.5
0.6	86°	59.1	35.7	19.0	5.6	0.1	4.6	1.6	0.8	0.3	0.5
0.6	87°	59.4	35.9	19.1	5.7	0.1	4.6	1.6	0.8	0.3	0.5
0.6	88°	59.6	36.0	19.2	5.7	0.1	4.6	1.6	0.8	0.3	0.5
0.6	89°	59.9	36.1	19.2	5.7	0.1	4.6	1.6	0.8	0.3	0.5



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CANDELA DISTRIBUTION (continued):

225°	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	
0.6	90°	60.0	36.2	19.3	5.7	0.1	4.7	1.6	0.8	0.3	0.5
0.6	91°	60.2	36.4	19.3	5.7	0.1	4.7	1.6	0.8	0.3	0.5
0.6	92°	60.4	36.4	19.4	5.7	0.1	4.7	1.6	0.8	0.3	0.5
0.6	93°	60.5	36.5	19.4	5.7	0.1	4.7	1.6	0.8	0.3	0.5
0.6	94°	60.6	36.6	19.4	5.8	0.1	4.7	1.6	0.8	0.3	0.5
0.6	95°	60.7	36.7	19.5	5.8	0.1	4.7	1.6	0.8	0.3	0.5
0.6	96°	60.8	36.7	19.5	5.8	0.1	4.7	1.6	0.8	0.3	0.5
0.6	97°	60.8	36.7	19.5	5.8	0.1	4.7	1.6	0.8	0.3	0.5
0.6	98°	60.9	36.7	19.5	5.8	0.1	4.7	1.6	0.8	0.3	0.5
0.6	99°	60.9	36.7	19.5	5.8	0.1	4.6	1.6	0.8	0.3	0.5
0.6	100°	60.8	36.7	19.5	5.8	0.1	4.6	1.6	0.8	0.3	0.5
0.6	101°	60.8	36.7	19.5	5.7	0.1	4.6	1.6	0.8	0.3	0.5
0.6	102°	60.7	36.7	19.5	5.7	0.1	4.6	1.6	0.7	0.3	0.5
0.7	103°	60.6	36.6	19.4	5.7	0.1	4.5	1.6	0.7	0.3	0.5
0.7	104°	60.5	36.5	19.4	5.7	0.1	4.5	1.5	0.7	0.2	0.5
0.7	105°	60.4	36.4	19.3	5.7	0.1	4.4	1.5	0.7	0.2	0.4
0.7	106°	60.2	36.3	19.3	5.7	0.1	4.4	1.5	0.7	0.2	0.4
0.7	107°	60.0	36.2	19.2	5.6	0.1	4.4	1.5	0.7	0.2	0.4
0.7	108°	59.7	36.0	19.1	5.6	0.1	4.3	1.5	0.7	0.2	0.4
0.7	109°	59.5	35.9	19.1	5.6	0.1	4.3	1.5	0.7	0.2	0.3
0.7	110°	59.2	35.7	19.0	5.6	0.1	4.2	1.4	0.7	0.2	0.3
0.7	111°	58.9	35.5	18.9	5.5	0.1	4.2	1.4	0.7	0.2	0.3
0.7	112°	58.5	35.3	18.8	5.5	0.1	4.1	1.4	0.7	0.2	0.3
0.7	113°	58.2	35.1	18.6	5.4	0.1	4.1	1.4	0.7	0.2	0.3
0.7	114°	57.8	34.9	18.5	5.4	0.1	4.1	1.4	0.7	0.2	0.3
0.7	115°	57.4	34.7	18.4	5.4	0.1	4.0	1.3	0.7	0.2	0.3
0.7	116°	56.9	34.4	18.2	5.3	0.1	4.0	1.3	0.6	0.1	0.2
0.7	117°	56.5	34.1	18.1	5.3	0.1	3.9	1.3	0.6	0.1	0.2
0.7	118°	56.0	33.9	17.9	5.2	0.1	3.9	1.3	0.6	0.1	0.2
0.7	119°	55.5	33.6	17.8	5.1	0.1	3.9	1.3	0.6	0.1	0.2
0.7	120°	55.0	33.2	17.6	5.1	0.1	3.8	1.3	0.6	0.1	0.2
0.8	121°	54.4	32.9	17.4	5.0	0.1	3.8	1.3	0.6	0.1	0.1
0.8	122°	53.9	32.5	17.2	5.0	0.2	3.8	1.2	0.6	0.1	0.1
0.8	123°	53.3	32.2	17.0	4.9	0.2	3.7	1.2	0.6	0.1	0.1
0.8	124°	52.7	31.8	16.8	4.8	0.2	3.7	1.2	0.6	0.1	0.1
0.8	125°	52.0	31.4	16.6	4.8	0.2	3.6	1.2	0.6	0.1	0.1
0.8	126°	51.3	31.0	16.4	4.7	0.2	3.6	1.2	0.6	0.1	0.1
0.8	127°	50.6	30.5	16.1	4.6	0.2	3.6	1.2	0.6	0.1	0.1
0.8	128°	49.9	30.1	15.9	4.6	0.2	3.5	1.1	0.5	0.1	0.1
0.8	129°	49.1	29.7	15.7	4.5	0.2	3.5	1.1	0.5	0.1	0.1
0.8	130°	48.4	29.2	15.4	4.4	0.2	3.4	1.1	0.5	0.1	0.1
0.8	131°	47.6	28.7	15.1	4.3	0.2	3.3	1.1	0.5	0.1	0.1
0.8	132°	46.8	28.2	14.9	4.2	0.2	3.3	1.1	0.5	0.1	0.2
0.8	133°	46.0	27.7	14.6	4.1	0.2	3.3	1.1	0.5	0.1	0.2
0.8	134°	45.0	27.2	14.3	4.1	0.2	3.2	1.0	0.5	0.1	0.3



TEST NUMBER: P1431943

CATALOG NUMBER: HSLUNVMW-3000K

CANDELA DISTRIBUTION (continued):

225°	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	
0.8	135°	44.2	26.7	14.0	4.0	0.2	3.2	1.0	0.5	0.1	0.3
0.8	136°	43.3	26.1	13.7	3.9	0.2	3.1	1.0	0.5	0.1	0.2
0.8	137°	42.4	25.6	13.4	3.8	0.2	3.1	1.0	0.5	0.1	0.2
0.8	138°	41.5	25.0	13.1	3.7	0.2	3.0	1.0	0.5	0.1	0.3
0.8	139°	40.6	24.4	12.8	3.6	0.2	3.0	1.0	0.5	0.1	0.3
0.8	140°	39.5	23.8	12.4	3.5	0.2	2.9	0.9	0.5	0.1	0.3
0.8	141°	38.6	23.3	12.1	3.4	0.2	2.9	0.9	0.5	0.1	0.2
0.8	142°	37.6	22.6	11.8	3.3	0.2	2.8	0.9	0.4	0.1	0.2
0.8	143°	36.5	22.0	11.4	3.2	0.2	2.8	0.9	0.4	0.1	0.2
0.8	144°	35.5	21.3	11.1	3.1	0.2	2.8	0.9	0.4	0.1	0.2
0.8	145°	34.4	20.7	10.8	3.0	0.2	2.8	0.9	0.4	0.1	0.2
0.8	146°	33.4	20.1	10.4	2.9	0.2	2.7	0.8	0.4	0.1	0.2
0.8	147°	32.3	19.4	10.0	2.7	0.2	2.7	0.8	0.4	0.1	0.2
0.8	148°	31.2	18.8	9.7	2.6	0.2	2.7	0.8	0.4	0.1	0.2
0.8	149°	30.0	18.0	9.3	2.5	0.2	2.6	0.8	0.4	0.1	0.2
0.7	150°	28.9	17.3	9.0	2.4	0.2	2.6	0.8	0.4	0.1	0.2
0.7	151°	27.8	16.7	8.6	2.3	0.2	2.6	0.8	0.4	0.1	0.2
0.7	152°	26.7	16.0	8.2	2.2	0.2	2.6	0.7	0.4	0.1	0.2
0.7	153°	25.4	15.2	7.8	2.1	0.2	2.5	0.7	0.4	0.1	0.2
0.7	154°	24.3	14.6	7.5	2.0	0.2	2.5	0.7	0.4	0.1	0.2
0.7	155°	23.1	13.8	7.1	1.9	0.2	2.5	0.7	0.3	0.1	0.2
0.7	156°	21.9	13.1	6.7	1.8	0.2	2.4	0.7	0.3	0.1	0.2
0.7	157°	20.8	12.4	6.3	1.7	0.1	2.4	0.7	0.3	0.1	0.2
0.7	158°	19.6	11.7	5.9	1.6	0.2	2.3	0.7	0.3	0.0	0.2
0.7	159°	18.4	11.0	5.6	1.4	0.1	2.3	0.7	0.3	0.0	0.2
0.7	160°	17.2	10.3	5.2	1.3	0.1	2.2	0.7	0.3	0.0	0.2
0.7	161°	16.1	9.6	4.8	1.2	0.1	2.2	0.7	0.3	0.1	0.2
0.6	162°	15.0	8.9	4.5	1.1	0.1	2.1	0.7	0.3	0.0	0.2
0.6	163°	13.8	8.2	4.1	1.0	0.1	2.0	0.7	0.3	0.0	0.2
0.6	164°	12.6	7.5	3.7	0.9	0.1	1.9	0.7	0.3	0.0	0.2
0.6	165°	11.5	6.8	3.4	0.8	0.1	1.8	0.6	0.3	0.0	0.2
0.6	166°	10.4	6.2	3.1	0.7	0.1	1.7	0.6	0.3	0.0	0.2
0.6	167°	9.3	5.5	2.7	0.7	0.1	1.5	0.6	0.3	0.0	0.2
0.6	168°	8.2	4.9	2.4	0.6	0.1	1.2	0.6	0.1	0.0	0.1
0.5	169°	7.2	4.3	2.1	0.5	0.1	0.7	0.4	0.0	0.0	0.0
0.5	170°	6.3	3.7	1.8	0.4	0.1	0.5	0.1	0.0	0.0	0.0
0.4	171°	5.3	3.1	1.5	0.3	0.1	0.4	0.0	0.0	0.0	0.0
0.3	172°	4.4	2.6	1.2	0.1	0.0	0.2	0.0	0.0	0.0	0.0
0.3	173°	3.5	2.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.3	174°	2.7	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.3	175°	2.0	1.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	176°	1.4	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	177°	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.3	179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1431943
 CATALOG NUMBER: HSLUNVMW-3000K

CANDELA DISTRIBUTION (continued):

225°		247.5°	270°	292.5°	315°	337.5°	360°
0.0	0°	0.0	0.0	0.0	0.0	0.0	0.0
	1°	0.0	0.0	0.1	0.1	0.1	0.1
	2°	0.0	0.0	0.2	0.3	0.3	0.4
	3°	0.0	0.0	0.4	0.4	0.7	0.7
	4°	0.0	0.0	0.6	0.7	1.1	1.2
	5°	0.0	0.0	0.8	1.1	1.6	1.8
	6°	0.0	0.0	1.0	1.4	2.0	2.3
	7°	0.0	0.0	1.3	1.8	2.6	2.9
	8°	0.0	0.0	1.7	2.2	3.1	3.5
	9°	0.1	0.0	2.1	2.5	3.7	4.1
	10°	0.1	0.0	2.5	2.9	4.3	4.8
	11°	0.1	0.0	2.8	3.3	4.9	5.4
	12°	0.1	0.0	3.2	3.8	5.5	6.1
	13°	0.1	0.0	3.6	4.2	6.1	6.9
	14°	0.1	0.0	4.0	4.7	6.8	7.6
	15°	0.1	0.0	4.4	5.1	7.5	8.3
	16°	0.2	0.0	4.9	5.6	8.2	9.2
	17°	0.2	0.0	5.2	6.1	8.9	9.9
	18°	0.3	0.0	5.7	6.6	9.6	10.7
	19°	0.3	0.0	6.1	7.1	10.3	11.5
	20°	0.3	0.0	6.5	7.6	11.1	12.4
	21°	0.3	0.0	6.9	8.1	11.9	13.2
	22°	0.4	0.0	7.4	8.6	12.6	14.0
	23°	0.4	0.0	7.8	9.2	13.4	14.9
	24°	0.4	0.0	8.3	9.7	14.1	15.8
	25°	0.4	0.0	8.7	10.2	14.9	16.7
	26°	0.4	0.0	9.2	10.8	15.7	17.5
	27°	0.4	0.0	9.7	11.3	16.5	18.4
	28°	0.4	0.0	10.1	11.9	17.2	19.3
	29°	0.4	0.0	10.6	12.4	18.1	20.2
	30°	0.4	0.0	11.0	13.0	18.8	21.0
	31°	0.5	0.0	11.5	13.6	19.6	21.9
	32°	0.5	0.1	12.0	14.1	20.4	22.8
	33°	0.5	0.1	12.5	14.7	21.2	23.6
	34°	0.5	0.1	13.0	15.2	22.0	24.6
	35°	0.5	0.1	13.4	15.8	22.8	25.4
	36°	0.5	0.1	13.9	16.3	23.6	26.3
	37°	0.5	0.1	14.4	16.9	24.4	27.2
	38°	0.5	0.1	14.9	17.5	25.1	28.1
	39°	0.5	0.1	15.3	18.0	26.0	28.9
	40°	0.5	0.1	15.8	18.6	26.7	29.7
	41°	0.5	0.1	16.3	19.1	27.5	30.6
	42°	0.5	0.1	16.8	19.7	28.3	31.5
	43°	0.5	0.1	17.2	20.2	29.0	32.4
	44°	0.5	0.1	17.7	20.7	29.8	33.2

TEST NUMBER: P1431943

CATALOG NUMBER: HSLUNVMW-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	0.5	0.1	18.2	21.3	30.5	34.1
46°	0.5	0.1	18.6	21.8	31.3	34.9
47°	0.5	0.1	19.1	22.3	32.1	35.7
48°	0.5	0.1	19.5	22.9	32.8	36.5
49°	0.5	0.1	20.0	23.4	33.5	37.3
50°	0.5	0.2	20.4	23.9	34.3	38.1
51°	0.5	0.2	20.8	24.4	35.0	38.9
52°	0.6	0.2	21.3	25.0	35.7	39.7
53°	0.6	0.2	21.7	25.5	36.4	40.5
54°	0.6	0.2	22.1	25.9	37.0	41.3
55°	0.6	0.2	22.6	26.4	37.7	42.0
56°	0.6	0.2	23.0	26.9	38.4	42.8
57°	0.6	0.3	23.4	27.4	39.1	43.5
58°	0.6	0.3	23.8	27.8	39.8	44.2
59°	0.6	0.3	24.2	28.3	40.4	44.9
60°	0.6	0.3	24.6	28.7	41.1	45.7
61°	0.6	0.3	25.0	29.2	41.7	46.4
62°	0.6	0.3	25.4	29.6	42.3	47.1
63°	0.6	0.3	25.8	30.1	42.9	47.8
64°	0.6	0.3	26.1	30.5	43.5	48.5
65°	0.6	0.3	26.5	30.9	44.1	49.1
66°	0.6	0.3	26.8	31.3	44.7	49.7
67°	0.6	0.3	27.2	31.8	45.2	50.4
68°	0.6	0.3	27.5	32.1	45.8	51.0
69°	0.6	0.4	27.8	32.5	46.3	51.6
70°	0.6	0.4	28.2	32.8	46.9	52.2
71°	0.6	0.4	28.5	33.2	47.4	52.8
72°	0.6	0.4	28.8	33.5	47.8	53.3
73°	0.6	0.4	29.1	33.9	48.3	53.8
74°	0.6	0.4	29.4	34.2	48.8	54.4
75°	0.7	0.4	29.6	34.5	49.2	54.9
76°	0.7	0.5	29.9	34.8	49.7	55.3
77°	0.7	0.5	30.1	35.1	50.1	55.8
78°	0.7	0.5	30.4	35.4	50.5	56.2
79°	0.7	0.5	30.6	35.7	50.8	56.7
80°	0.7	0.5	30.9	35.9	51.3	57.1
81°	0.7	0.5	31.1	36.1	51.6	57.5
82°	0.7	0.5	31.3	36.4	51.9	57.9
83°	0.7	0.5	31.5	36.6	52.2	58.2
84°	0.7	0.5	31.6	36.8	52.5	58.6
85°	0.7	0.5	31.8	37.0	52.8	58.8
86°	0.7	0.6	31.9	37.2	53.1	59.1
87°	0.7	0.6	32.1	37.4	53.3	59.4
88°	0.7	0.6	32.2	37.5	53.5	59.6
89°	0.7	0.6	32.3	37.6	53.7	59.9



TEST NUMBER: P1431943
 CATALOG NUMBER: HSLUNVMW-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.7	0.6	32.4	37.7	53.9	60.0
91°	0.7	0.6	32.5	37.9	54.0	60.2
92°	0.7	0.6	32.5	37.9	54.2	60.4
93°	0.7	0.6	32.6	38.0	54.3	60.5
94°	0.7	0.6	32.7	38.1	54.4	60.6
95°	0.7	0.6	32.7	38.2	54.5	60.7
96°	0.7	0.6	32.7	38.2	54.5	60.8
97°	0.7	0.7	32.7	38.2	54.6	60.8
98°	0.7	0.7	32.8	38.3	54.6	60.9
99°	0.7	0.7	32.7	38.3	54.6	60.9
100°	0.7	0.8	32.7	38.2	54.6	60.8
101°	0.7	0.8	32.7	38.2	54.5	60.8
102°	0.7	0.8	32.6	38.2	54.5	60.7
103°	0.7	0.8	32.5	38.1	54.4	60.6
104°	0.7	0.9	32.5	38.0	54.3	60.5
105°	0.6	0.9	32.4	37.9	54.1	60.4
106°	0.6	0.9	32.2	37.8	54.0	60.2
107°	0.6	0.9	32.1	37.7	53.8	60.0
108°	0.6	1.0	32.0	37.5	53.6	59.7
109°	0.6	1.0	31.8	37.4	53.4	59.5
110°	0.6	1.0	31.6	37.2	53.1	59.2
111°	0.6	1.0	31.4	37.0	52.9	58.9
112°	0.6	1.0	31.2	36.8	52.6	58.5
113°	0.6	1.0	31.0	36.6	52.3	58.2
114°	0.6	1.0	30.8	36.3	52.0	57.8
115°	0.6	1.0	30.5	36.1	51.5	57.4
116°	0.6	1.0	30.2	35.8	51.2	56.9
117°	0.6	1.0	29.9	35.5	50.8	56.5
118°	0.6	1.0	29.6	35.2	50.4	56.0
119°	0.6	0.9	29.3	34.9	49.9	55.5
120°	0.6	0.9	29.0	34.5	49.4	55.0
121°	0.6	0.9	28.7	34.2	48.9	54.4
122°	0.6	0.9	28.3	33.8	48.4	53.9
123°	0.6	0.9	27.9	33.4	47.8	53.3
124°	0.5	0.8	27.6	33.0	47.3	52.7
125°	0.5	0.8	27.2	32.6	46.7	52.0
126°	0.5	0.8	26.8	32.1	46.1	51.3
127°	0.5	0.8	26.4	31.7	45.5	50.6
128°	0.5	0.8	25.9	31.2	44.8	49.9
129°	0.5	0.8	25.5	30.7	44.2	49.1
130°	0.5	0.8	25.0	30.2	43.5	48.4
131°	0.5	0.8	24.5	29.7	42.7	47.6
132°	0.5	0.7	24.1	29.2	42.0	46.8
133°	0.5	0.7	23.6	28.7	41.3	46.0
134°	0.5	0.7	23.1	28.1	40.5	45.0



TEST NUMBER: P1431943
 CATALOG NUMBER: HSLUNVMW-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	0.5	0.7	22.6	27.5	39.8	44.2
136°	0.5	0.6	22.1	26.9	39.0	43.3
137°	0.5	0.6	21.5	26.3	38.1	42.4
138°	0.5	0.6	20.9	25.7	37.2	41.5
139°	0.5	0.6	20.4	25.1	36.4	40.6
140°	0.5	0.6	19.8	24.5	35.5	39.5
141°	0.4	0.5	19.3	23.8	34.6	38.6
142°	0.4	0.5	18.7	23.2	33.7	37.6
143°	0.4	0.5	18.1	22.5	32.7	36.5
144°	0.4	0.5	17.5	21.8	31.8	35.5
145°	0.4	0.5	16.9	21.1	30.9	34.4
146°	0.4	0.5	16.3	20.5	29.9	33.4
147°	0.4	0.4	15.7	19.8	28.9	32.3
148°	0.4	0.4	15.1	19.1	27.9	31.2
149°	0.4	0.4	14.5	18.3	26.9	30.0
150°	0.4	0.4	13.9	17.6	25.9	28.9
151°	0.4	0.4	13.3	16.8	24.9	27.8
152°	0.4	0.4	12.7	16.1	23.8	26.7
153°	0.4	0.4	12.0	15.4	22.7	25.4
154°	0.4	0.3	11.4	14.6	21.7	24.3
155°	0.4	0.3	10.8	13.9	20.6	23.1
156°	0.4	0.3	10.2	13.2	19.6	21.9
157°	0.4	0.3	9.6	12.4	18.6	20.8
158°	0.4	0.3	9.0	11.7	17.4	19.6
159°	0.4	0.3	8.4	10.9	16.4	18.4
160°	0.3	0.3	7.8	10.2	15.4	17.2
161°	0.3	0.2	7.2	9.5	14.3	16.1
162°	0.3	0.2	6.6	8.8	13.2	15.0
163°	0.3	0.2	6.1	8.1	12.3	13.8
164°	0.3	0.2	5.5	7.4	11.3	12.6
165°	0.3	0.2	5.0	6.8	10.2	11.5
166°	0.3	0.2	4.5	6.1	9.2	10.4
167°	0.3	0.1	4.0	5.5	8.3	9.3
168°	0.2	0.1	3.6	4.6	7.4	8.2
169°	0.2	0.1	3.1	3.7	6.5	7.2
170°	0.1	0.1	2.5	2.9	5.6	6.3
171°	0.1	0.1	1.6	2.0	4.4	5.3
172°	0.0	0.1	0.9	1.3	3.7	4.4
173°	0.0	0.1	0.3	1.0	3.0	3.5
174°	0.0	0.1	0.0	0.6	2.4	2.7
175°	0.0	0.0	0.0	0.4	1.8	2.0
176°	0.0	0.0	0.0	0.1	1.2	1.4
177°	0.0	0.0	0.0	0.0	0.3	0.5
178°	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1431943
CATALOG NUMBER: HSLUNVMW-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
180°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)