

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: LUMARK

Report Number: P212887

Luminaire Tested: **NFFLD-C40-D-UNV-33-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P212887
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-16-1196-4)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NFFLD-C40-D-UNV-33-7030
Description: NIGHT FALCON LED FLOOD LIGHT
Light Source: (8) 3000K CCT, 72 CRI LEDS
CLU028-1204C4-40ALK3
Ballast/Driver: OSRAM
OT180/UNV/1250C/2DIMLT2

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13709.9 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1.33' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G1

Input Watts (W): 142.8
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

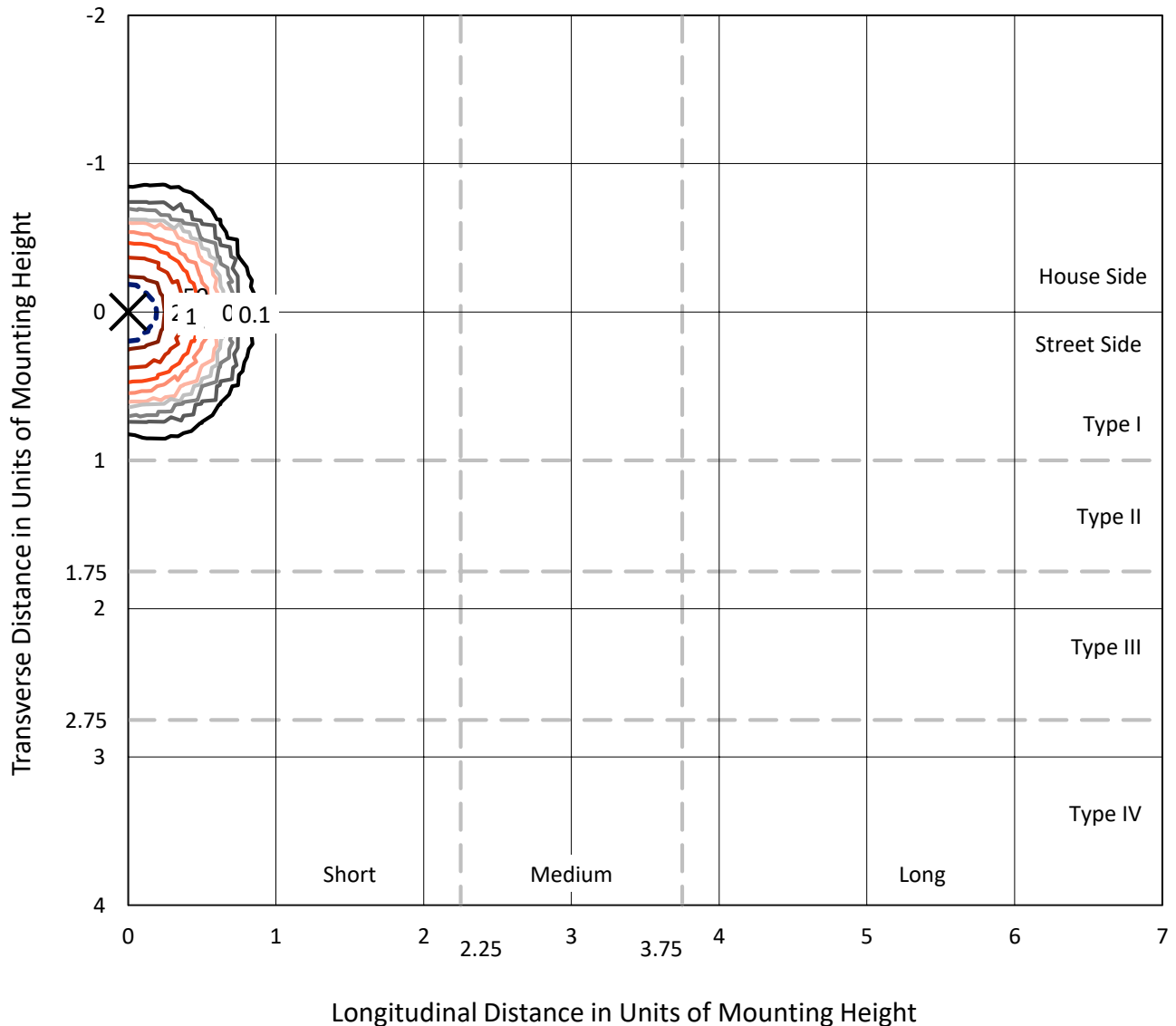


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Iso-Footcandle Lines of Horizontal Illumination

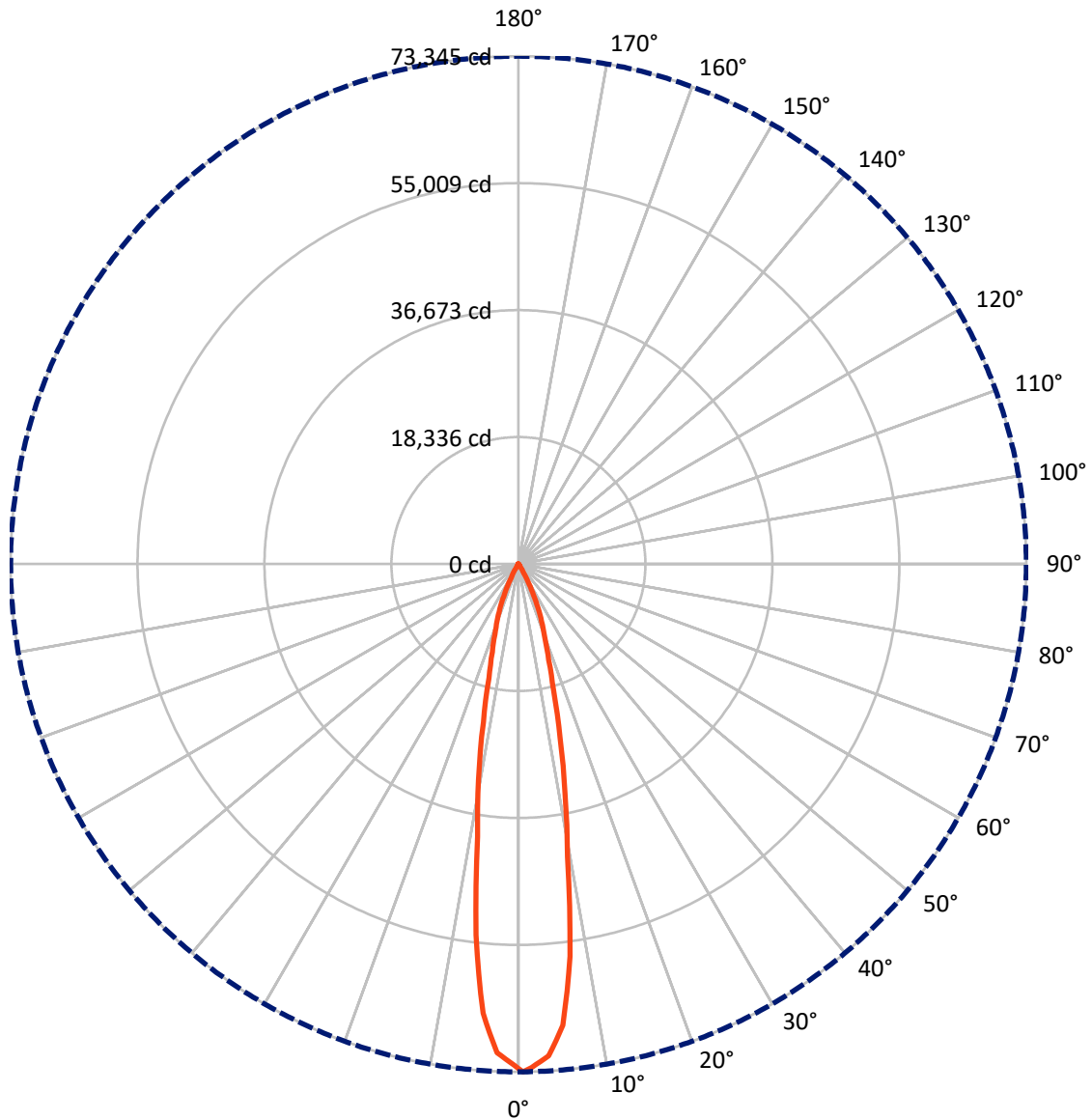
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 183.4 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 0-Deg Vertical

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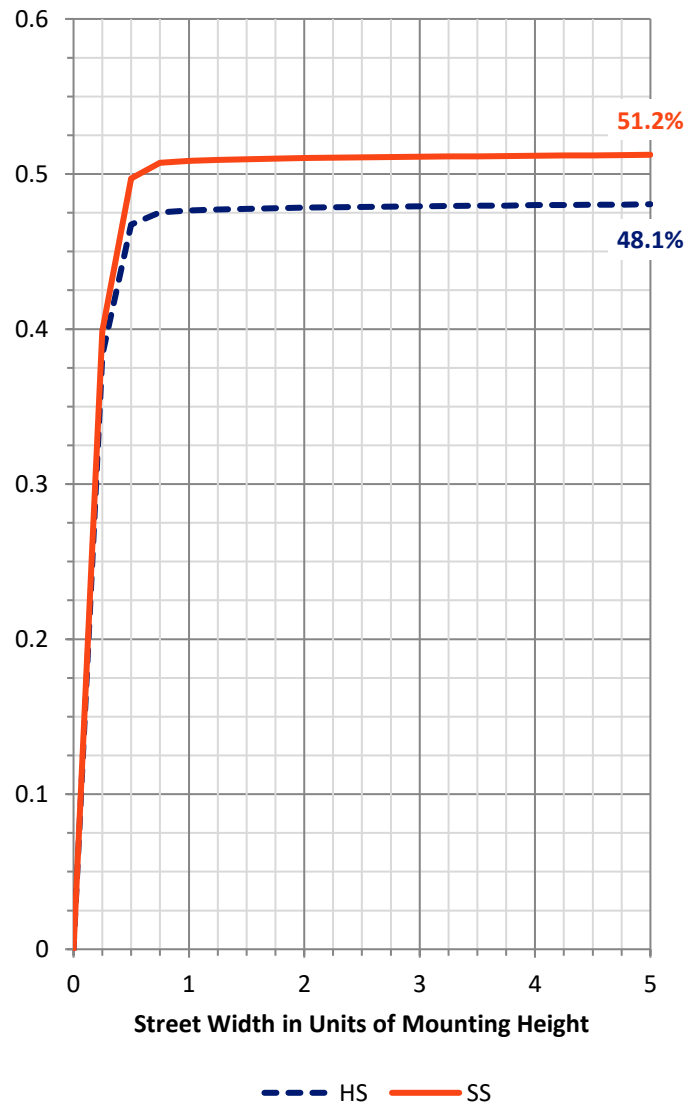
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6698.5	0.0	6698.5
	% Fixture	48.9	0.0	48.9
Street Side	Lumens	7011.4	0.0	7011.4
	% Fixture	51.1	0.0	51.1
Total	Lumens	13709.9	0.0	13709.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5235.0	38.2
10°-20°	5417.7	39.5
20°-30°	2562.2	18.7
30°-40°	475.1	3.5
40°-50°	54.9	0.4
50°-60°	32.5	0.2
60°-70°	27.7	0.2
70°-80°	51.2	0.4
80°-90°	36.1	0.3
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
0°-90°	13709.9	100.0
0°-180°	13709.9	100.0



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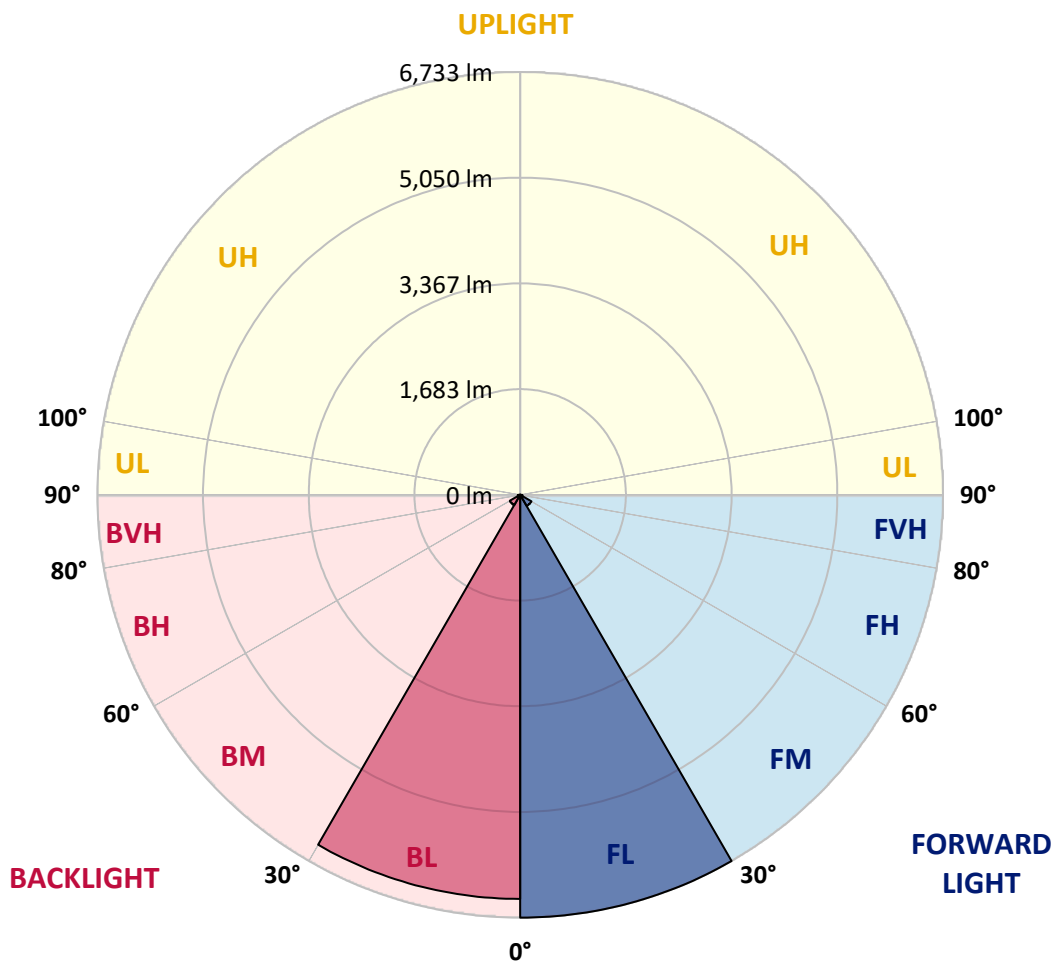
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6733.3	49.1			
FM	(30°-60°)	207.0	1.5			
FH	(60°-80°)	35.0	0.3			G0/660
FVH	(80°-90°)	35.0	0.3			G1/100
BL	(0°-30°)	6435.4	46.9	B5		
BM	(30°-60°)	190.1	1.4	B0/220		
BH	(60°-80°)	36.1	0.3	B0/110		G0/660
BVH	(80°-90°)	36.0	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3
1°	72725.4	72726.1	72746.5	72786.4	72845.4	72921.8	73013.3	73116.9	73229.0	73345.3	73168.0
3°	71166.5	71085.8	71068.1	70742.4	70539.8	70467.5	70527.6	70717.7	70682.4	70714.3	70561.5
5°	66925.0	66879.6	66229.2	65932.6	65839.8	65626.6	65365.6	65330.6	65718.9	65750.3	65515.6
7°	57130.2	57033.3	56396.6	56066.7	56052.1	55924.6	55478.2	55318.4	55496.2	55434.4	54857.1
9°	42833.3	42992.5	43515.3	43325.7	43123.0	43266.9	43258.6	43067.2	42316.6	42179.9	41810.9
11°	33813.6	33674.0	33733.9	33517.5	33846.7	33679.8	33442.5	33456.9	33238.4	33114.2	32808.1
13°	25842.2	25766.4	25858.5	25926.8	25861.8	25776.2	25734.6	25601.1	25309.3	25206.9	24842.0
15°	18947.6	19093.6	19188.3	19050.3	19129.1	19065.3	18789.0	18852.5	18459.3	18197.4	18098.4
17°	14526.9	14619.5	14619.8	14563.5	14535.2	14396.9	14361.5	14258.5	14096.5	13876.3	13882.5
19.5°	10906.2	10947.3	11048.1	11037.5	11042.3	10983.3	10874.1	10847.8	10684.8	10796.9	10538.3
22.5°	7939.9	7928.3	7936.0	8054.6	8075.9	8059.2	8006.0	7931.1	7886.4	8148.7	7775.3
25.5°	4996.5	5035.0	5169.5	5358.9	5435.8	5438.8	5405.0	5371.8	5310.6	5260.0	5210.7
29°	2038.9	2141.8	2387.5	2462.8	2592.8	2583.1	2616.5	2650.1	2469.5	2336.8	2376.7
33°	305.6	394.7	619.6	504.5	627.0	617.2	674.0	717.1	546.1	399.5	524.8
37.5°	73.8	100.2	128.4	116.3	117.8	115.2	126.1	113.5	110.9	92.0	110.2
42.5°	69.9	86.3	90.8	93.9	91.3	79.5	76.7	70.3	76.0	81.4	70.7
47.5°	31.6	61.2	64.0	73.1	65.6	61.0	53.8	51.4	56.5	62.3	47.8
55°	3.8	42.0	39.4	37.5	26.3	19.4	14.1	15.0	13.1	11.5	16.9
65°	3.8	42.2	47.3	27.9	21.4	21.6	19.6	17.6	21.9	21.1	20.6
75°	0.0	39.0	32.8	32.5	21.9	29.9	41.3	38.4	53.2	41.2	54.3
85°	3.8	22.8	45.4	103.5	108.6	120.9	121.5	131.8	135.0	144.7	127.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3
1°	72996.8	72837.5	72695.2	72574.7	72479.4	72412.2	72374.6	72367.1	72374.6	72412.2	72479.4
3°	70466.4	70079.6	69875.1	69866.8	70054.8	70425.5	70494.4	70644.4	70494.4	70425.5	70054.8
5°	64815.7	64522.4	64429.3	64195.3	64026.5	64236.2	64902.4	65081.6	64902.4	64236.2	64026.5
7°	54172.5	54011.5	54222.5	53907.3	53018.3	52757.7	53464.6	53941.6	53464.6	52757.7	53018.3
9°	41998.7	41648.3	41178.2	40930.0	40883.3	40246.7	39741.2	39808.5	39741.2	40246.7	40883.3
11°	32588.6	32245.6	32032.6	31780.4	31698.5	31272.1	31267.2	31618.6	31267.2	31272.1	31698.5
13°	24696.8	24455.6	24186.3	23928.7	23753.5	23577.7	23194.9	23425.8	23194.9	23577.7	23753.5
15°	18140.9	17796.3	17776.9	17613.0	17272.0	17471.2	17140.6	16986.3	17140.6	17471.2	17272.0
17°	13843.4	13727.1	13572.5	13551.0	13473.6	13465.7	13396.3	13271.7	13396.3	13465.7	13473.6
19.5°	10594.3	10510.6	10435.2	10331.8	10275.1	10296.2	10226.1	10142.6	10226.1	10296.2	10275.1
22.5°	7726.9	7717.0	7733.6	7628.6	7586.8	7506.1	7488.6	7436.9	7488.6	7506.1	7586.8
25.5°	5181.6	5111.0	5068.2	5033.5	4903.6	4876.4	4721.3	4649.7	4721.3	4876.4	4903.6
29°	2495.1	2366.4	2280.2	2280.7	2158.0	2186.7	1966.3	1841.5	1966.3	2186.7	2158.0
33°	654.0	577.0	511.0	516.4	406.2	529.3	336.4	226.1	336.4	529.3	406.2
37.5°	114.4	105.9	103.3	106.2	107.8	125.1	106.5	101.6	106.5	125.1	107.8
42.5°	69.2	65.0	77.5	94.1	96.3	94.8	84.9	69.9	84.9	94.8	96.3
47.5°	48.9	41.7	56.8	68.7	79.9	68.6	59.1	39.3	59.1	68.6	79.9
55°	7.4	13.5	22.3	36.1	36.0	45.1	40.4	11.5	40.4	45.1	36.0
65°	13.2	16.5	29.5	24.8	32.8	41.1	42.1	3.8	42.1	41.1	32.8
75°	34.9	39.8	40.6	25.0	39.7	29.1	41.2	0.0	41.2	29.1	39.7
85°	131.8	123.3	123.6	115.5	96.9	53.7	40.7	0.0	40.7	53.7	96.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3	73345.3
1°	72574.7	72695.2	72837.5	72996.8	73168.0	73345.3	73229.0	73116.9	73013.3	72921.8	72845.4
3°	69866.8	69875.1	70079.6	70466.4	70561.5	70714.3	70682.4	70717.7	70527.6	70467.5	70539.8
5°	64195.3	64429.3	64522.4	64815.7	65515.6	65750.3	65718.9	65330.6	65365.6	65626.6	65839.8
7°	53907.3	54222.5	54011.5	54172.5	54857.1	55434.4	55496.2	55318.4	55478.2	55924.6	56052.1
9°	40930.0	41178.2	41648.3	41998.7	41810.9	42179.9	42316.6	43067.2	43258.6	43266.9	43123.0
11°	31780.4	32032.6	32245.6	32588.6	32808.1	33114.2	33238.4	33456.9	33442.5	33679.8	33846.7
13°	23928.7	24186.3	24455.6	24696.8	24842.0	25206.9	25309.3	25601.1	25734.6	25776.2	25861.8
15°	17613.0	17776.9	17796.3	18140.9	18098.4	18197.4	18459.3	18852.5	18789.0	19065.3	19129.1
17°	13551.0	13572.5	13727.1	13843.4	13882.5	13876.3	14096.5	14258.5	14361.5	14396.9	14535.2
19.5°	10331.8	10435.2	10510.6	10594.3	10538.3	10796.9	10684.8	10847.8	10874.1	10983.3	11042.3
22.5°	7628.6	7733.6	7717.0	7726.9	7775.3	8148.7	7886.4	7931.1	8006.0	8059.2	8075.9
25.5°	5033.5	5068.2	5111.0	5181.6	5210.7	5260.0	5310.6	5371.8	5405.0	5438.8	5435.8
29°	2280.7	2280.2	2366.4	2495.1	2376.7	2336.8	2469.5	2650.1	2616.5	2583.1	2592.8
33°	516.4	511.0	577.0	654.0	524.8	399.5	546.1	717.1	674.0	617.2	627.0
37.5°	106.2	103.3	105.9	114.4	110.2	92.0	110.9	113.5	126.1	115.2	117.8
42.5°	94.1	77.5	65.0	69.2	70.7	81.4	76.0	70.3	76.7	79.5	91.3
47.5°	68.7	56.8	41.7	48.9	47.8	62.3	56.5	51.4	53.8	61.0	65.6
55°	36.1	22.3	13.5	7.4	16.9	11.5	13.1	15.0	14.1	19.4	26.3
65°	24.8	29.5	16.5	13.2	20.6	21.1	21.9	17.6	19.6	21.6	21.4
75°	25.0	40.6	39.8	34.9	54.3	41.2	53.2	38.4	41.3	29.9	21.9
85°	115.5	123.6	123.3	131.8	127.9	144.7	135.0	131.8	121.5	120.9	108.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	73345.3	73345.3	73345.3	73345.3
1°	72786.4	72746.5	72726.1	72725.4
3°	70742.4	71068.1	71085.8	71166.5
5°	65932.6	66229.2	66879.6	66925.0
7°	56066.7	56396.6	57033.3	57130.2
9°	43325.7	43515.3	42992.5	42833.3
11°	33517.5	33733.9	33674.0	33813.6
13°	25926.8	25858.5	25766.4	25842.2
15°	19050.3	19188.3	19093.6	18947.6
17°	14563.5	14619.8	14619.5	14526.9
19.5°	11037.5	11048.1	10947.3	10906.2
22.5°	8054.6	7936.0	7928.3	7939.9
25.5°	5358.9	5169.5	5035.0	4996.5
29°	2462.8	2387.5	2141.8	2038.9
33°	504.5	619.6	394.7	305.6
37.5°	116.3	128.4	100.2	73.8
42.5°	93.9	90.8	86.3	69.9
47.5°	73.1	64.0	61.2	31.6
55°	37.5	39.4	42.0	3.8
65°	27.9	47.3	42.2	3.8
75°	32.5	32.8	39.0	0.0
85°	103.5	45.4	22.8	3.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)