

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: P201049

Luminaire Tested: **NFFLD-S-C70-D-UNV-33**

Test Date: 05/24/16

Test Information

Test Method: LM-79-08
Report Number: P201049
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-16-1017-3)
Test Lab: INNOVATION CENTER(G2)
Test Date: 05/24/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NFFLD-S-C70-D-UNV-33
Description: LOW WATTAGE LED FLOODLIGHT
Light Source: (2) CITIZEN 5700 70
CLU028-1204C4-57AL7K3
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER
OT50/UNV/0610C/2DIMLT2

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2852.9 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Luminous Opening: (L: 0 ' x W: 0.46 ' x H: 0 '
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

Input Watts (W): 25.9
Input Voltage (V): 120.1
Input Current (Ain): 0.217
Voltage Rise (V): NR
Power Factor: 0.9954
Total Harmonic Distortion (THDi): 8.28%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 24 HR
Ambient Temperature (°C): 24.5
Test Distance: 25 FT

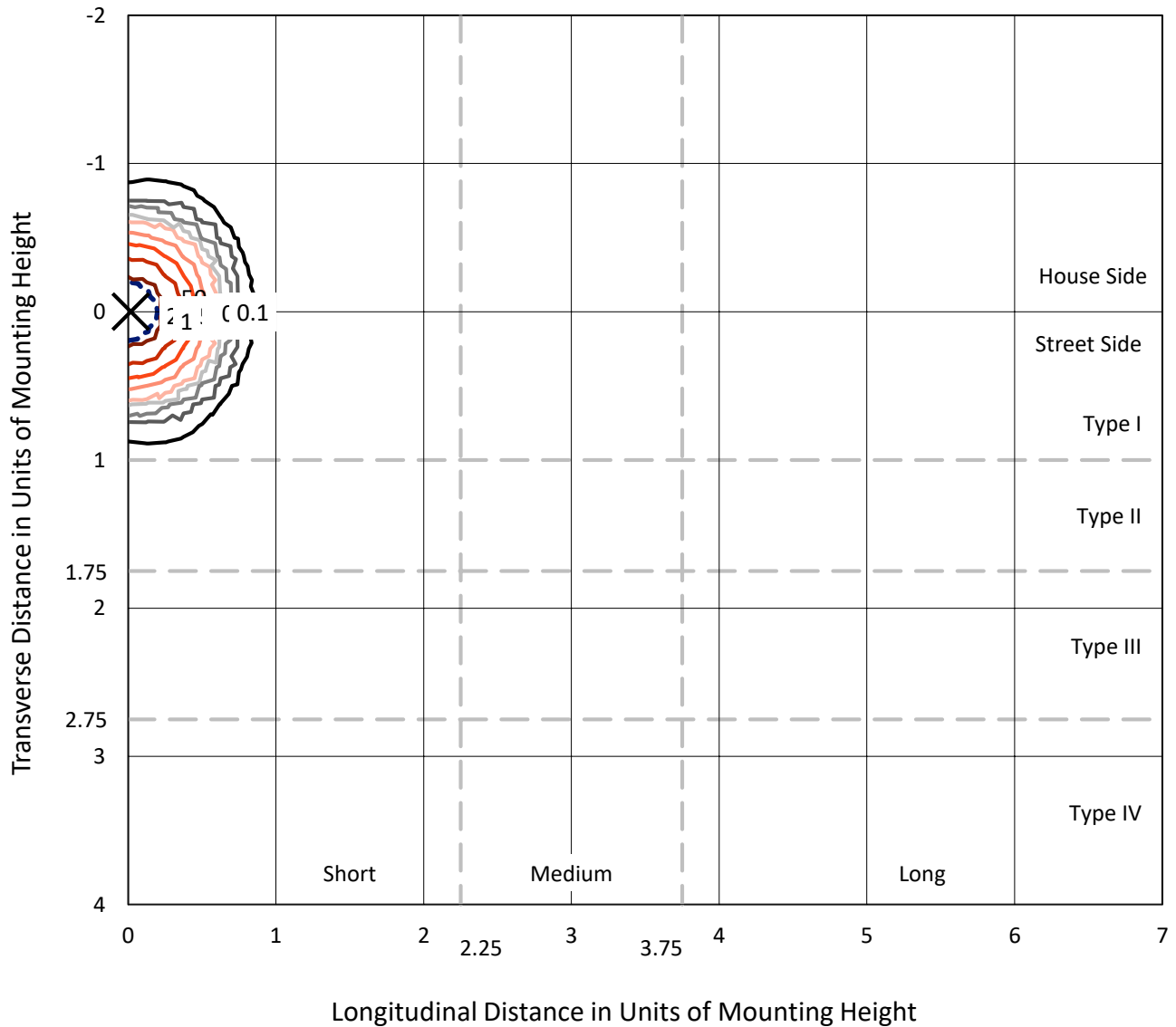


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Iso-Footcandle Lines of Horizontal Illumination

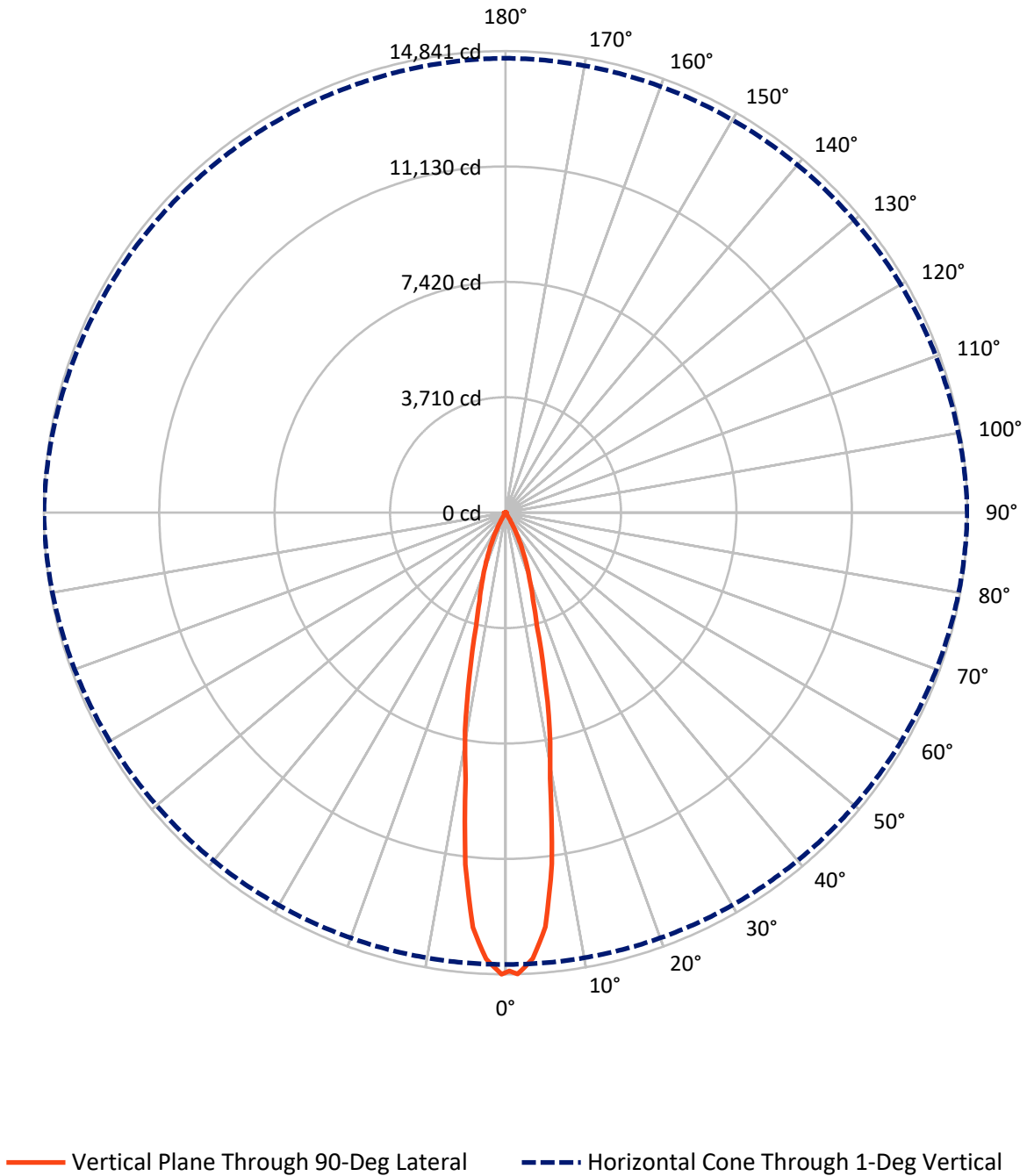
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 147.3 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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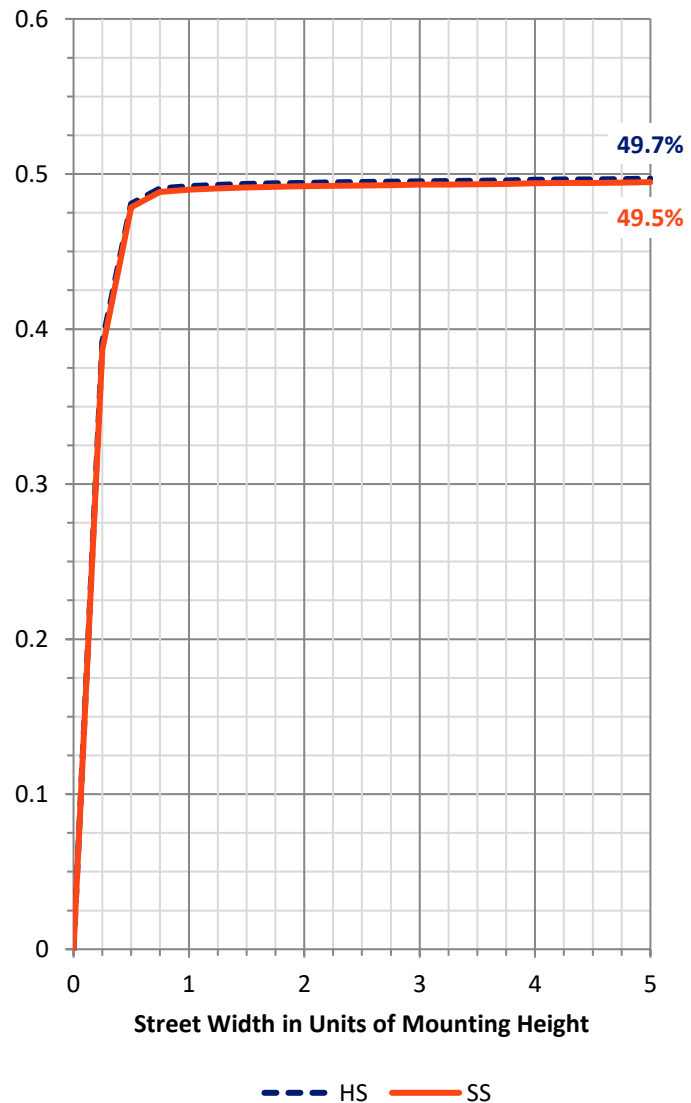
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1442.5	0.0	1442.5
	% Fixture	50.6	0.0	50.6
Street Side	Lumens	1410.3	0.0	1410.3
	% Fixture	49.4	0.0	49.4
Total	Lumens	2852.9	0.0	2852.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1072.3	37.6
10°-20°	1142.3	40.0
20°-30°	523.3	18.3
30°-40°	100.3	3.5
40°-50°	13.4	0.5
50°-60°	6.6	0.2
60°-70°	5.4	0.2
70°-80°	13.1	0.5
80°-90°	10.1	0.4
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°	2852.9	100.0
0°-180°	2852.9	100.0



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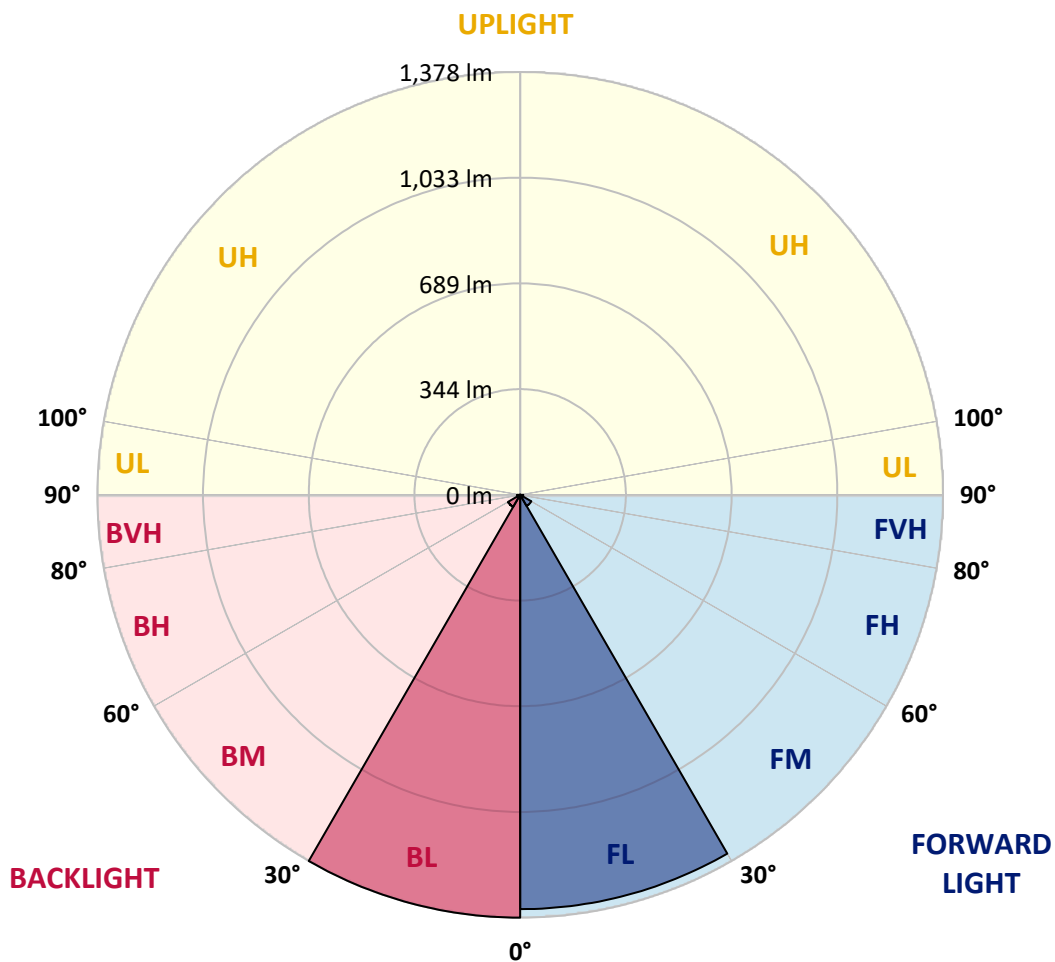
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1350.1	47.3			
FM	(30°-60°)	41.9	1.5			
FH	(60°-80°)	7.8	0.3			G0/660
FVH	(80°-90°)	10.4	0.4			G1/100
BL	(0°-30°)	1377.9	48.3	B3/2500		
BM	(30°-60°)	46.0	1.6	B0/220		
BH	(60°-80°)	7.9	0.3	B0/110		G0/660
BVH	(80°-90°)	10.5	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3
1°	14524.1	14532.3	14547.9	14571.3	14602.8	14641.8	14687.1	14737.0	14789.1	14840.6	14778.6
3°	14184.1	14210.5	14244.4	14179.1	14151.3	14164.6	14218.5	14308.9	14332.7	14359.0	14344.4
5°	13027.3	13171.7	13083.4	13056.0	13092.1	13115.4	13117.2	13165.7	13299.1	13374.2	13364.4
7°	11029.4	11196.2	11009.6	11012.5	11156.6	11185.7	11112.9	11146.1	11278.3	11381.1	11352.7
9°	8412.0	8579.2	8643.1	8694.3	8679.9	8682.3	8740.7	8749.6	8639.4	8666.0	8664.1
11°	6829.2	6902.5	6837.0	6886.1	6928.1	6942.2	6948.7	6979.0	7048.1	7118.4	7085.8
13°	5340.3	5218.1	5205.6	5241.2	5251.2	5301.1	5333.7	5321.3	5305.5	5344.2	5329.0
15°	3818.1	3769.5	3839.6	3799.4	3861.3	3915.0	3833.9	3884.3	3825.5	3788.8	3831.7
17°	2950.5	2910.7	2927.0	2917.9	2943.8	2926.3	2939.3	2947.4	2951.7	2940.8	2956.2
19.5°	2200.2	2164.4	2189.7	2168.2	2179.6	2177.5	2190.7	2211.9	2208.9	2247.1	2214.4
22.5°	1541.7	1530.4	1544.1	1556.2	1541.8	1563.0	1563.1	1568.0	1579.8	1581.8	1591.8
25.5°	992.6	976.0	987.4	995.0	1003.1	1018.3	1019.4	1029.4	1027.7	1029.8	1040.5
29°	439.6	435.3	456.7	436.2	458.4	454.6	471.9	490.3	465.7	453.3	472.9
33°	81.1	92.3	124.1	91.7	112.6	109.4	119.6	134.1	106.7	80.1	109.2
37.5°	26.4	30.8	33.9	31.2	30.2	29.2	29.3	28.8	27.7	23.4	28.0
42.5°	22.5	23.8	25.6	25.1	22.8	20.4	18.3	17.7	17.5	17.6	17.5
47.5°	11.7	14.7	18.3	16.4	14.6	11.9	9.6	9.5	8.6	8.8	8.6
55°	2.9	7.8	10.1	8.3	6.2	3.6	2.2	1.0	1.3	0.0	1.8
65°	2.0	8.8	7.9	5.8	4.2	2.9	1.9	2.3	2.6	2.0	2.8
75°	1.0	7.8	5.2	4.1	6.4	7.6	9.8	10.8	13.8	11.7	13.8
85°	0.0	4.4	15.2	28.4	35.2	37.1	37.7	40.4	40.6	44.0	40.6
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):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3
1°	14718.7	14665.7	14623.6	14595.0	14580.6	14579.7	14590.0	14608.1	14590.0	14579.7	14580.6
3°	14327.9	14269.0	14238.8	14240.7	14274.5	14336.8	14401.7	14476.2	14401.7	14336.8	14274.5
5°	13269.5	13262.3	13310.1	13349.2	13335.6	13344.8	13451.9	13618.4	13451.9	13344.8	13335.6
7°	11280.4	11278.4	11362.0	11389.4	11398.7	11480.2	11629.7	11793.4	11629.7	11480.2	11398.7
9°	8815.4	8860.2	8816.0	8802.9	8888.9	8949.9	8822.2	8925.9	8822.2	8949.9	8888.9
11°	7032.4	7009.4	7022.6	7011.7	6960.2	6996.5	7054.5	7153.6	7054.5	6996.5	6960.2
13°	5362.2	5360.0	5332.3	5301.9	5281.1	5258.2	5265.4	5396.0	5265.4	5258.2	5281.1
15°	3901.4	3856.2	3914.7	3895.9	3839.7	3884.9	3851.3	3754.6	3851.3	3884.9	3839.7
17°	2959.0	2977.4	2976.7	2984.4	2986.5	2997.4	3010.1	3032.6	3010.1	2997.4	2986.5
19.5°	2227.4	2235.9	2240.3	2247.2	2243.7	2262.3	2260.3	2293.0	2260.3	2262.3	2243.7
22.5°	1590.3	1597.5	1614.5	1617.2	1627.5	1633.0	1636.1	1629.6	1636.1	1633.0	1627.5
25.5°	1052.0	1051.6	1060.1	1075.1	1080.3	1083.2	1078.5	1077.6	1078.5	1083.2	1080.3
29°	505.9	495.9	492.7	510.5	506.0	520.6	507.8	500.2	507.8	520.6	506.0
33°	141.7	133.5	128.2	134.4	118.7	146.7	118.9	105.5	118.9	146.7	118.7
37.5°	29.4	31.9	32.5	32.7	33.4	37.8	33.6	27.4	33.6	37.8	33.4
42.5°	18.1	19.3	21.4	23.4	25.1	25.4	23.8	21.5	23.8	25.4	25.1
47.5°	10.5	10.6	13.1	15.1	17.1	17.8	15.5	11.7	15.5	17.8	17.1
55°	1.6	2.6	4.4	6.2	8.5	10.0	7.8	2.9	7.8	10.0	8.5
65°	3.0	2.5	2.9	4.2	5.9	7.9	8.8	2.0	8.8	7.9	5.9
75°	10.8	10.2	8.6	6.5	4.1	5.2	7.8	1.0	7.8	5.2	4.1
85°	41.0	38.4	37.5	36.1	28.4	15.2	4.4	0.0	4.4	15.2	28.4
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°	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3	14729.3
1°	14595.0	14623.6	14665.7	14718.7	14778.6	14840.6	14789.1	14737.0	14687.1	14641.8	14602.8
3°	14240.7	14238.8	14269.0	14327.9	14344.4	14359.0	14332.7	14308.9	14218.5	14164.6	14151.3
5°	13349.2	13310.1	13262.3	13269.5	13364.4	13374.2	13299.1	13165.7	13117.2	13115.4	13092.1
7°	11389.4	11362.0	11278.4	11280.4	11352.7	11381.1	11278.3	11146.1	11112.9	11185.7	11156.6
9°	8802.9	8816.0	8860.2	8815.4	8664.1	8666.0	8639.4	8749.6	8740.7	8682.3	8679.9
11°	7011.7	7022.6	7009.4	7032.4	7085.8	7118.4	7048.1	6979.0	6948.7	6942.2	6928.1
13°	5301.9	5332.3	5360.0	5362.2	5329.0	5344.2	5305.5	5321.3	5333.7	5301.1	5251.2
15°	3895.9	3914.7	3856.2	3901.4	3831.7	3788.8	3825.5	3884.3	3833.9	3915.0	3861.3
17°	2984.4	2976.7	2977.4	2959.0	2956.2	2940.8	2951.7	2947.4	2939.3	2926.3	2943.8
19.5°	2247.2	2240.3	2235.9	2227.4	2214.4	2247.1	2208.9	2211.9	2190.7	2177.5	2179.6
22.5°	1617.2	1614.5	1597.5	1590.3	1591.8	1581.8	1579.8	1568.0	1563.1	1563.0	1541.8
25.5°	1075.1	1060.1	1051.6	1052.0	1040.5	1029.8	1027.7	1029.4	1019.4	1018.3	1003.1
29°	510.5	492.7	495.9	505.9	472.9	453.3	465.7	490.3	471.9	454.6	458.4
33°	134.4	128.2	133.5	141.7	109.2	80.1	106.7	134.1	119.6	109.4	112.6
37.5°	32.7	32.5	31.9	29.4	28.0	23.4	27.7	28.8	29.3	29.2	30.2
42.5°	23.4	21.4	19.3	18.1	17.5	17.6	17.5	17.7	18.3	20.4	22.8
47.5°	15.1	13.1	10.6	10.5	8.6	8.8	8.6	9.5	9.6	11.9	14.6
55°	6.2	4.4	2.6	1.6	1.8	0.0	1.3	1.0	2.2	3.6	6.2
65°	4.2	2.9	2.5	3.0	2.8	2.0	2.6	2.3	1.9	2.9	4.2
75°	6.5	8.6	10.2	10.8	13.8	11.7	13.8	10.8	9.8	7.6	6.4
85°	36.1	37.5	38.4	41.0	40.6	44.0	40.6	40.4	37.7	37.1	35.2
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°	14729.3	14729.3	14729.3	14729.3
1°	14571.3	14547.9	14532.3	14524.1
3°	14179.1	14244.4	14210.5	14184.1
5°	13056.0	13083.4	13171.7	13027.3
7°	11012.5	11009.6	11196.2	11029.4
9°	8694.3	8643.1	8579.2	8412.0
11°	6886.1	6837.0	6902.5	6829.2
13°	5241.2	5205.6	5218.1	5340.3
15°	3799.4	3839.6	3769.5	3818.1
17°	2917.9	2927.0	2910.7	2950.5
19.5°	2168.2	2189.7	2164.4	2200.2
22.5°	1556.2	1544.1	1530.4	1541.7
25.5°	995.0	987.4	976.0	992.6
29°	436.2	456.7	435.3	439.6
33°	91.7	124.1	92.3	81.1
37.5°	31.2	33.9	30.8	26.4
42.5°	25.1	25.6	23.8	22.5
47.5°	16.4	18.3	14.7	11.7
55°	8.3	10.1	7.8	2.9
65°	5.8	7.9	8.8	2.0
75°	4.1	5.2	7.8	1.0
85°	28.4	15.2	4.4	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)