

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: P232897

Luminaire Tested: **NFFLD-L-C175-D-UNV-66**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232897
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-236-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NFFLD-L-C175-D-UNV-66
Description: LED FLOOD LIGHT LUMINAIRE
Light Source: (4) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48561.3 lumens
Efficiency: N/A
Efficacy: 131.0 lumens/watt
Luminous Opening: (L: 0 ' x W: 1 ' x H: 1.04 '
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 370.6
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

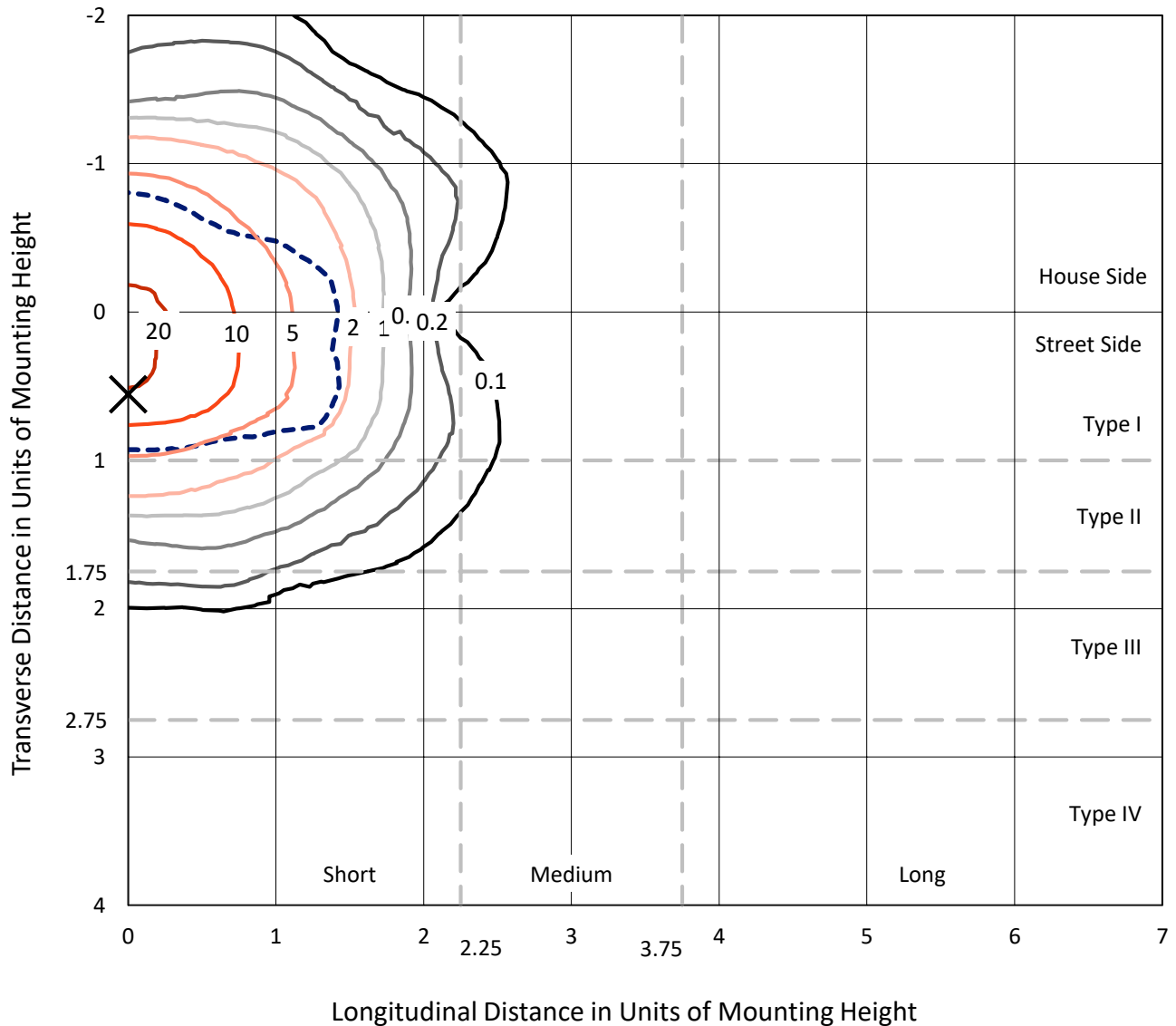


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

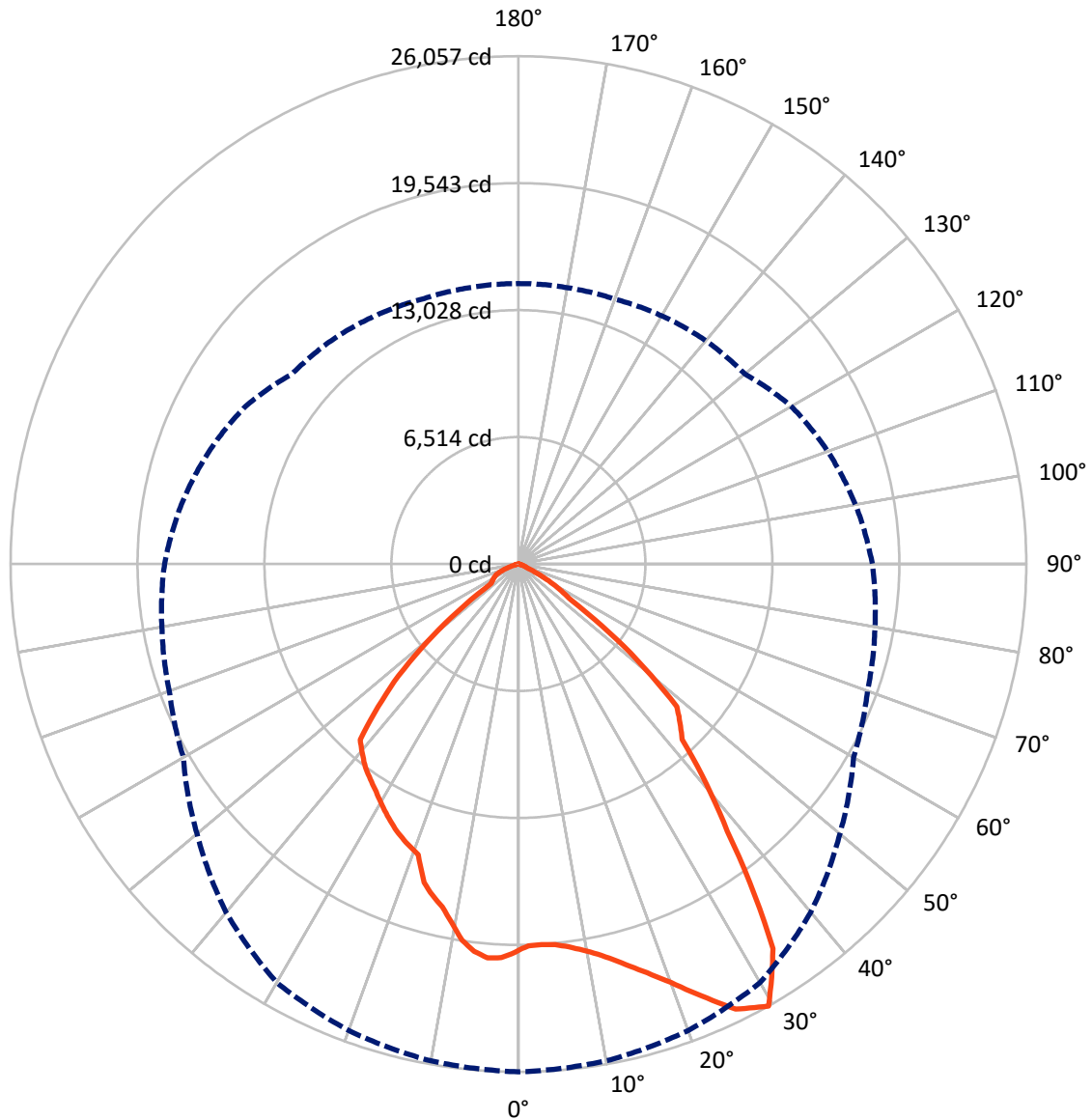


Based on 30 foot mounting height. Maximum calculated value = 21.9 fc
 Type I - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 29-Deg Vertical

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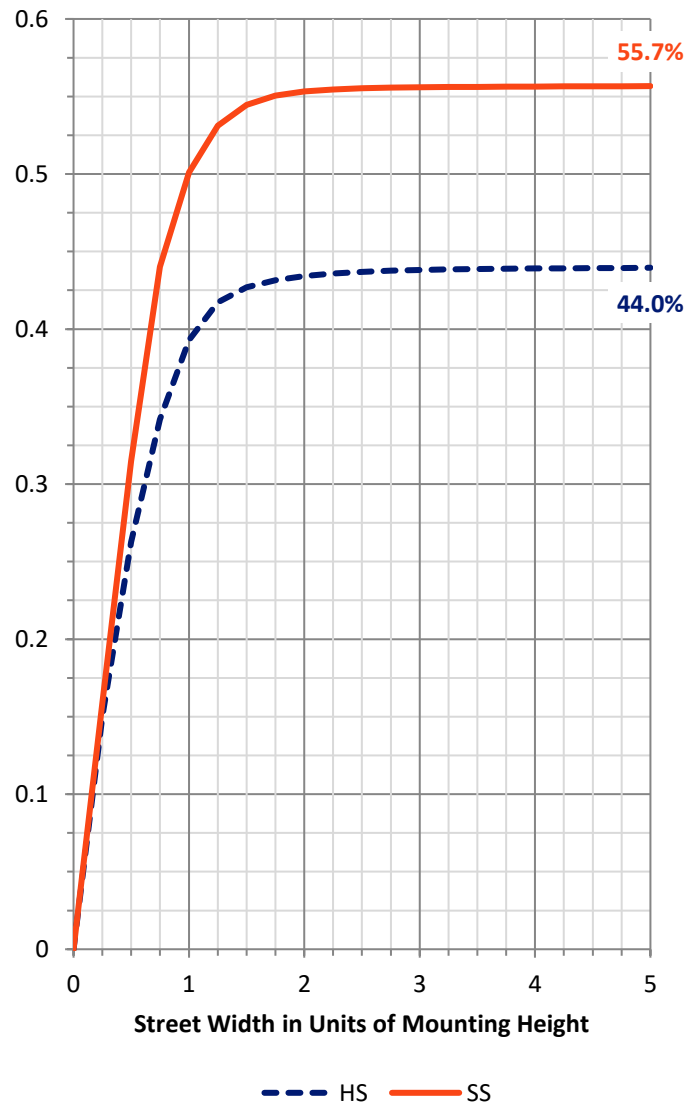
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21532.8	0.0	21532.8
	% Fixture	44.3	0.0	44.3
Street Side	Lumens	27028.5	0.0	27028.5
	% Fixture	55.7	0.0	55.7
Total	Lumens	48561.3	0.0	48561.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1894.6	3.9
10°-20°	5508.6	11.3
20°-30°	8843.0	18.2
30°-40°	10917.3	22.5
40°-50°	10700.2	22.0
50°-60°	7493.9	15.4
60°-70°	3137.7	6.5
70°-80°	664.2	1.4
80°-90°	89.1	0.2
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°	48561.3	100.0
0°-180°	48561.3	100.0



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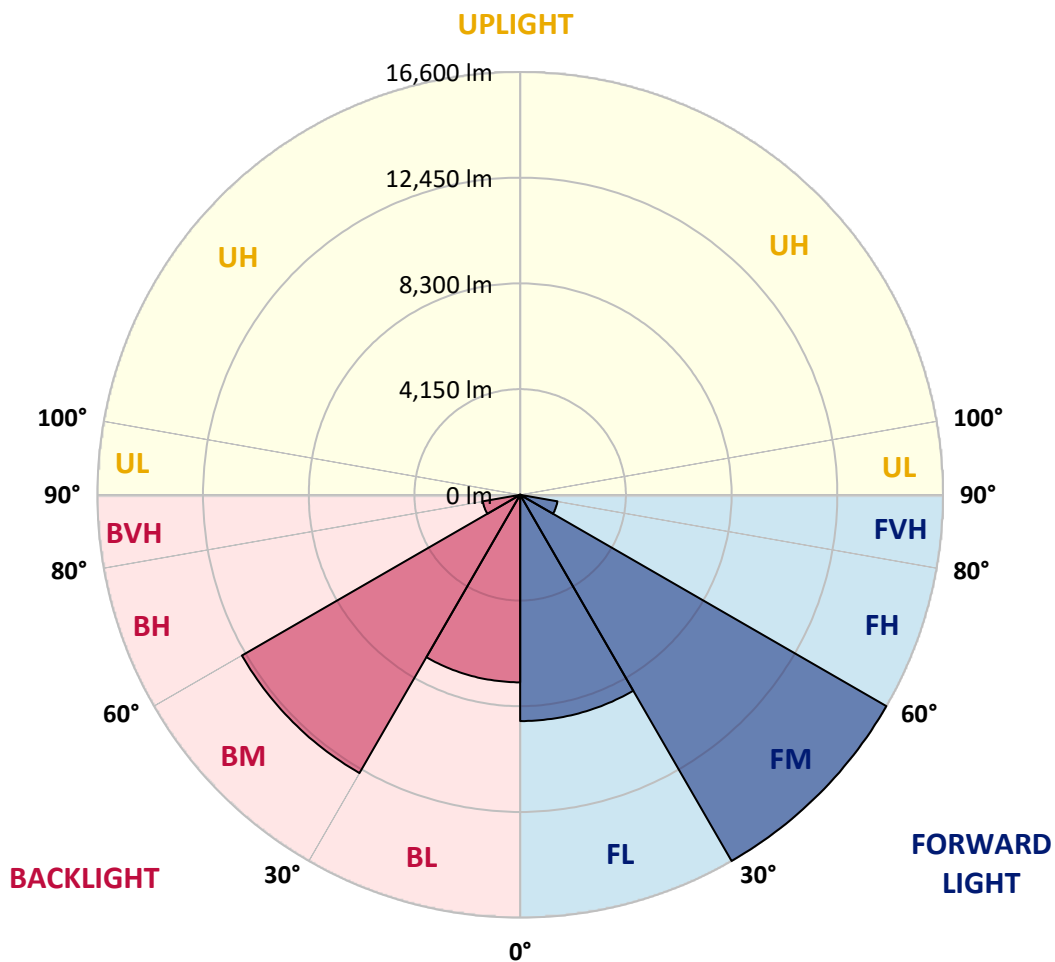
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	8881.7	18.3			
FM	(30°-60°)	16600.1	34.2			
FH	(60°-80°)	1486.3	3.1			G1/1800
FVH	(80°-90°)	38.1	0.1			G1/100
BL	(0°-30°)	7361.6	15.2	B5		
BM	(30°-60°)	12615.5	26.0	B5		
BH	(60°-80°)	1490.2	3.1	B3/2500		G3/2500
BVH	(80°-90°)	47.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8
1°	19603.8	19610.9	19622.0	19636.8	19655.0	19676.1	19699.4	19724.2	19749.6	19774.8	19802.1
3°	19559.8	19561.1	19566.9	19583.7	19602.9	19624.0	19646.3	19669.0	19737.6	19808.8	19895.5
5°	19620.8	19607.6	19607.6	19609.3	19607.5	19596.4	19614.9	19654.8	19713.4	19851.8	19972.1
7°	19802.8	19767.9	19743.4	19702.0	19649.7	19612.8	19600.6	19644.6	19736.3	19912.8	20053.7
9°	20086.8	20040.8	19985.0	19869.2	19727.1	19640.2	19590.0	19609.5	19721.2	19899.8	20040.7
11°	20419.8	20376.8	20284.7	20104.1	19888.0	19694.2	19592.0	19589.9	19702.7	19881.8	19962.9
13°	20873.8	20822.8	20664.2	20374.2	20088.3	19815.4	19608.2	19570.8	19702.5	19859.8	19859.9
15°	21408.8	21342.1	21118.8	20729.8	20329.7	19947.4	19655.1	19573.8	19748.9	19818.8	19710.3
17°	21988.8	21928.3	21621.5	21161.5	20616.9	20085.7	19716.1	19590.8	19758.7	19733.8	19501.2
19.5°	22832.8	22729.9	22332.4	21738.6	21017.0	20312.7	19783.9	19567.8	19875.2	20074.8	19409.7
22.5°	24065.8	23843.0	23337.3	22561.7	21603.3	20675.5	19850.3	19456.3	19517.3	19534.8	18824.2
25.5°	25405.8	25092.4	24490.0	23540.2	22420.9	21168.8	19851.7	19229.4	19077.5	18788.8	18206.9
29°	26056.8	25887.3	25471.1	24797.2	23331.6	21530.1	19849.4	19057.7	18574.7	18156.8	17559.6
33°	23664.8	23843.7	24409.5	25256.1	24047.7	21787.4	19846.1	18907.6	17918.3	17006.8	16543.3
37.5°	17405.8	17861.6	19489.6	21956.8	23104.9	22126.6	19998.9	18854.9	17320.8	16345.9	15616.8
42.5°	12312.9	12743.0	13836.3	15559.0	18326.9	20791.0	20385.0	18895.7	16733.1	15972.9	15130.6
47.5°	10937.9	10890.7	11001.7	11197.6	12703.6	16560.3	20043.4	18574.6	15694.4	15140.9	14686.9
55°	3277.0	3900.1	5207.7	6434.8	8252.3	9405.9	14601.9	14574.7	12604.9	13261.9	12470.4
65°	543.0	563.5	1133.7	1140.0	1687.1	2699.0	3322.4	3596.6	2411.8	734.0	2441.9
75°	81.0	96.7	141.9	114.3	139.1	116.3	190.9	242.8	265.6	414.0	399.0
85°	41.0	70.1	74.6	64.7	73.4	70.9	81.3	91.6	96.8	103.0	101.7
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°	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8
1°	19827.9	19851.7	19873.1	19891.5	19906.6	19917.5	19923.8	19924.8	19923.8	19917.5	19906.6
3°	19976.3	20031.8	20082.9	20128.8	20167.9	20198.6	20214.3	20216.8	20214.3	20198.6	20167.9
5°	20067.0	20155.2	20214.1	20220.6	20228.5	20237.3	20248.2	20264.8	20248.2	20237.3	20228.5
7°	20154.8	20192.5	20181.6	20140.1	20059.6	20006.8	19979.4	19997.8	19979.4	20006.8	20059.6
9°	20132.9	20084.7	19960.9	19831.8	19680.6	19558.9	19491.5	19522.8	19491.5	19558.9	19680.6
11°	19948.8	19803.2	19560.0	19314.9	19099.9	18861.8	18724.6	18723.8	18724.6	18861.8	19099.9
13°	19728.0	19399.6	19027.2	18683.7	18392.8	18187.0	18034.0	18014.8	18034.0	18187.0	18392.8
15°	19427.3	18966.6	18530.2	18152.3	17855.4	17692.1	17584.4	17568.8	17584.4	17692.1	17855.4
17°	19035.6	18545.8	18113.2	17772.6	17517.4	17236.6	17059.5	17044.8	17059.5	17236.6	17517.4
19.5°	18623.7	18148.5	17725.0	17364.9	16941.2	16279.5	15886.4	15771.9	15886.4	16279.5	16941.2
22.5°	18218.9	17753.6	17252.9	16591.4	15724.0	15511.7	15420.4	15398.9	15420.4	15511.7	15724.0
25.5°	17701.3	17139.7	16587.9	15606.9	15317.2	15098.3	15000.3	14982.9	15000.3	15098.3	15317.2
29°	16890.7	16168.4	15162.7	14954.3	14701.8	14461.7	14395.7	14389.9	14395.7	14461.7	14701.8
33°	15852.6	14964.4	14190.4	14084.2	13824.7	13709.9	13690.5	13690.9	13690.5	13709.9	13824.7
37.5°	14846.5	13917.9	13362.1	13059.4	12953.5	12986.3	13006.4	13050.9	13006.4	12986.3	12953.5
42.5°	14015.5	13142.7	12411.7	12079.0	12093.1	12027.1	12035.6	12129.9	12035.6	12027.1	12093.1
47.5°	13405.2	12485.2	11380.7	11075.4	10627.5	9395.2	8576.4	8406.9	8576.4	9395.2	10627.5
55°	11463.1	11329.0	9509.9	7302.2	5065.2	3316.4	2282.5	1720.0	2282.5	3316.4	5065.2
65°	3829.4	2916.9	1789.7	1379.7	1603.3	1388.9	1258.2	1249.0	1258.2	1388.9	1603.3
75°	511.2	339.9	354.3	267.6	341.0	293.7	181.7	162.0	181.7	293.7	341.0
85°	79.6	76.1	77.1	68.2	62.0	67.4	46.4	45.0	46.4	67.4	62.0
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°	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8	19737.8
1°	19891.5	19873.1	19851.7	19827.9	19802.1	19774.8	19749.6	19724.2	19699.4	19676.1	19655.0
3°	20128.8	20082.9	20031.8	19976.3	19895.5	19808.8	19737.6	19669.0	19646.3	19624.0	19602.9
5°	20220.6	20214.1	20155.2	20067.0	19972.1	19851.8	19713.4	19654.8	19614.9	19596.4	19607.5
7°	20140.1	20181.6	20192.5	20154.8	20053.7	19912.8	19736.3	19644.6	19600.6	19612.8	19649.7
9°	19831.8	19960.9	20084.7	20132.9	20040.7	19899.8	19721.2	19609.5	19590.0	19640.2	19727.1
11°	19314.9	19560.0	19803.2	19948.8	19962.9	19881.8	19702.7	19589.9	19592.0	19694.2	19888.0
13°	18683.7	19027.2	19399.6	19728.0	19859.9	19859.8	19702.5	19570.8	19608.2	19815.4	20088.3
15°	18152.3	18530.2	18966.6	19427.3	19710.3	19818.8	19748.9	19573.8	19655.1	19947.4	20329.7
17°	17772.6	18113.2	18545.8	19035.6	19501.2	19733.8	19758.7	19590.8	19716.1	20085.7	20616.9
19.5°	17364.9	17725.0	18148.5	18623.7	19409.7	20074.8	19875.2	19567.8	19783.9	20312.7	21017.0
22.5°	16591.4	17252.9	17753.6	18218.9	18824.2	19534.8	19517.3	19456.3	19850.3	20675.5	21603.3
25.5°	15606.9	16587.9	17139.7	17701.3	18206.9	18788.8	19077.5	19229.4	19851.7	21168.8	22420.9
29°	14954.3	15162.7	16168.4	16890.7	17559.6	18156.8	18574.7	19057.7	19849.4	21530.1	23331.6
33°	14084.2	14190.4	14964.4	15852.6	16543.3	17006.8	17918.3	18907.6	19846.1	21787.4	24047.7
37.5°	13059.4	13362.1	13917.9	14846.5	15616.8	16345.9	17320.8	18854.9	19998.9	22126.6	23104.9
42.5°	12079.0	12411.7	13142.7	14015.5	15130.6	15972.9	16733.1	18895.7	20385.0	20791.0	18326.9
47.5°	11075.4	11380.7	12485.2	13405.2	14686.9	15140.9	15694.4	18574.6	20043.4	16560.3	12703.6
55°	7302.2	9509.9	11329.0	11463.1	12470.4	13261.9	12604.9	14574.7	14601.9	9405.9	8252.3
65°	1379.7	1789.7	2916.9	3829.4	2441.9	734.0	2411.8	3596.6	3322.4	2699.0	1687.1
75°	267.6	354.3	339.9	511.2	399.0	414.0	265.6	242.8	190.9	116.3	139.1
85°	68.2	77.1	76.1	79.6	101.7	103.0	96.8	91.6	81.3	70.9	73.4
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):

	330°	340°	350°	360°
0°	19737.8	19737.8	19737.8	19737.8
1°	19636.8	19622.0	19610.9	19603.8
3°	19583.7	19566.9	19561.1	19559.8
5°	19609.3	19607.6	19607.6	19620.8
7°	19702.0	19743.4	19767.9	19802.8
9°	19869.2	19985.0	20040.8	20086.8
11°	20104.1	20284.7	20376.8	20419.8
13°	20374.2	20664.2	20822.8	20873.8
15°	20729.8	21118.8	21342.1	21408.8
17°	21161.5	21621.5	21928.3	21988.8
19.5°	21738.6	22332.4	22729.9	22832.8
22.5°	22561.7	23337.3	23843.0	24065.8
25.5°	23540.2	24490.0	25092.4	25405.8
29°	24797.2	25471.1	25887.3	26056.8
33°	25256.1	24409.5	23843.7	23664.8
37.5°	21956.8	19489.6	17861.6	17405.8
42.5°	15559.0	13836.3	12743.0	12312.9
47.5°	11197.6	11001.7	10890.7	10937.9
55°	6434.8	5207.7	3900.1	3277.0
65°	1140.0	1133.7	563.5	543.0
75°	114.3	141.9	96.7	81.0
85°	64.7	74.6	70.1	41.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)