

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: P189782

Luminaire Tested: **NFFLD-S-C70-D-UNV-33-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P189782
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-16-1017-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NFFLD-S-C70-D-UNV-33-7030
Description: LOW WATTAGE LED FLOODLIGHT
Light Source: (2) CITIZEN 3000 70
CLU028-1204C4-30AL7K3
Ballast/Driver: OSRAM ELECTRONIC DRIVER
OT50W/UNV/800C/2DIMLT2

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2826.7 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Luminous Opening: (L: 0 ' x W: 0.46 ' x H: 0.33 '
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

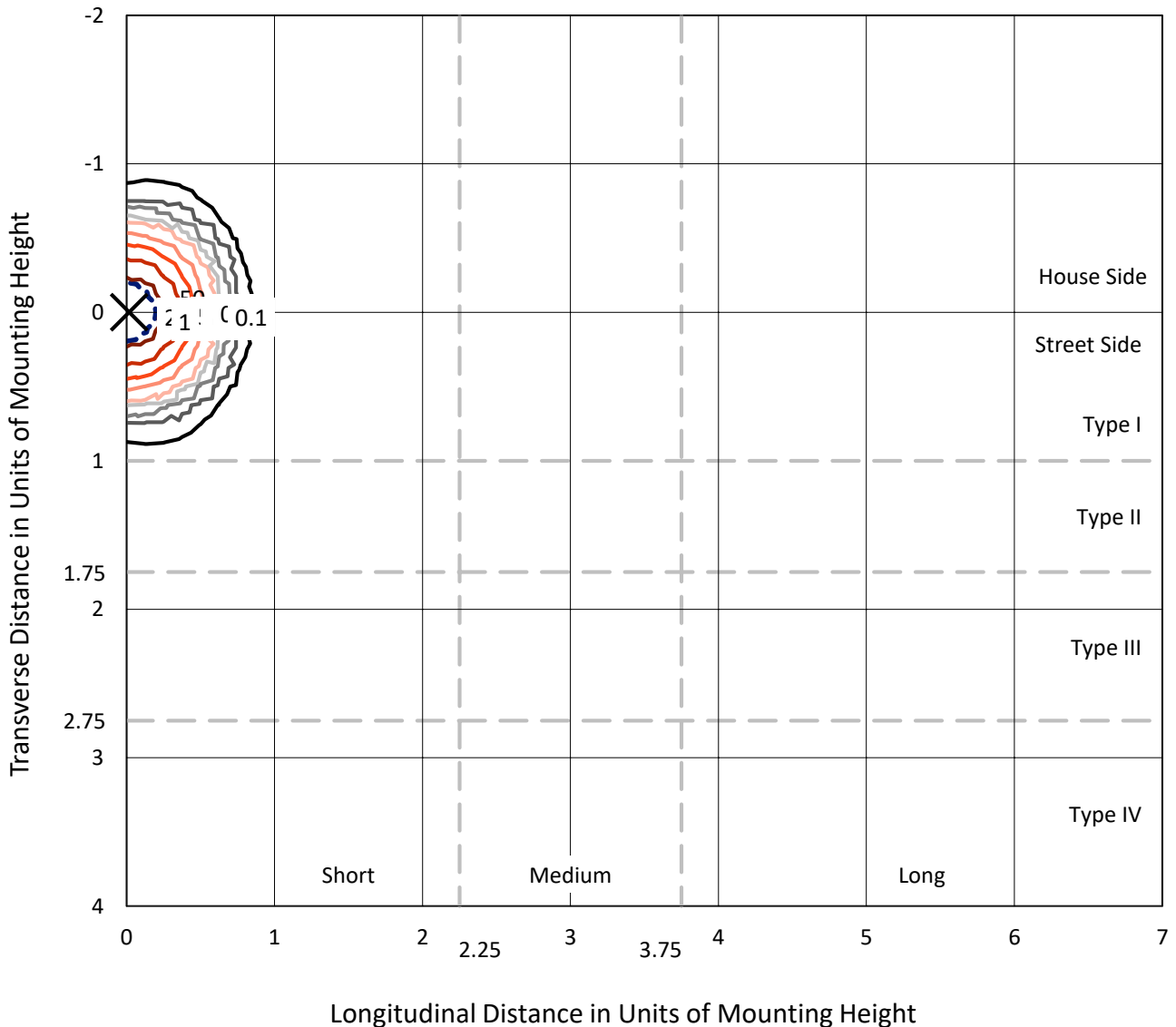
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

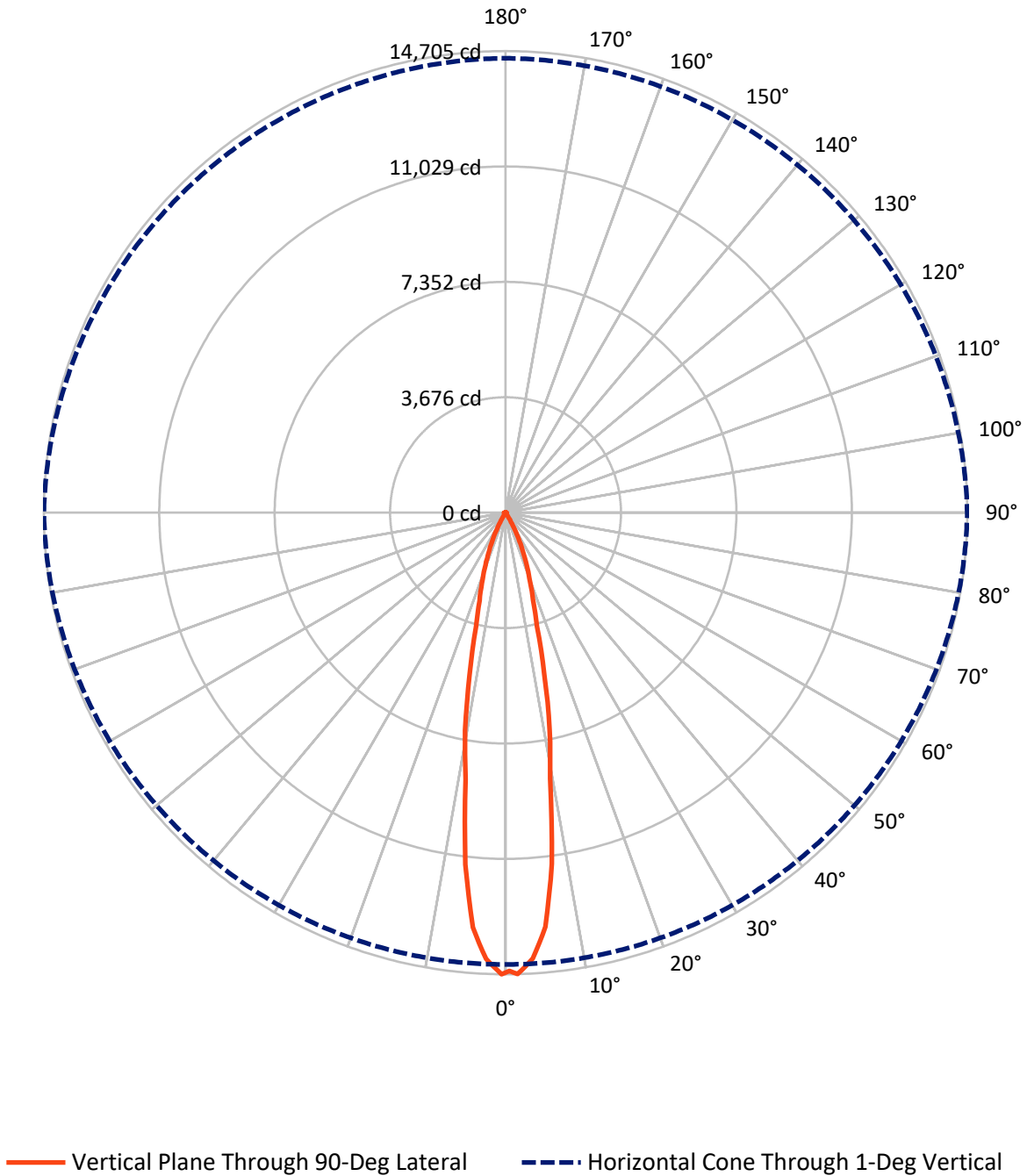
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 145.9 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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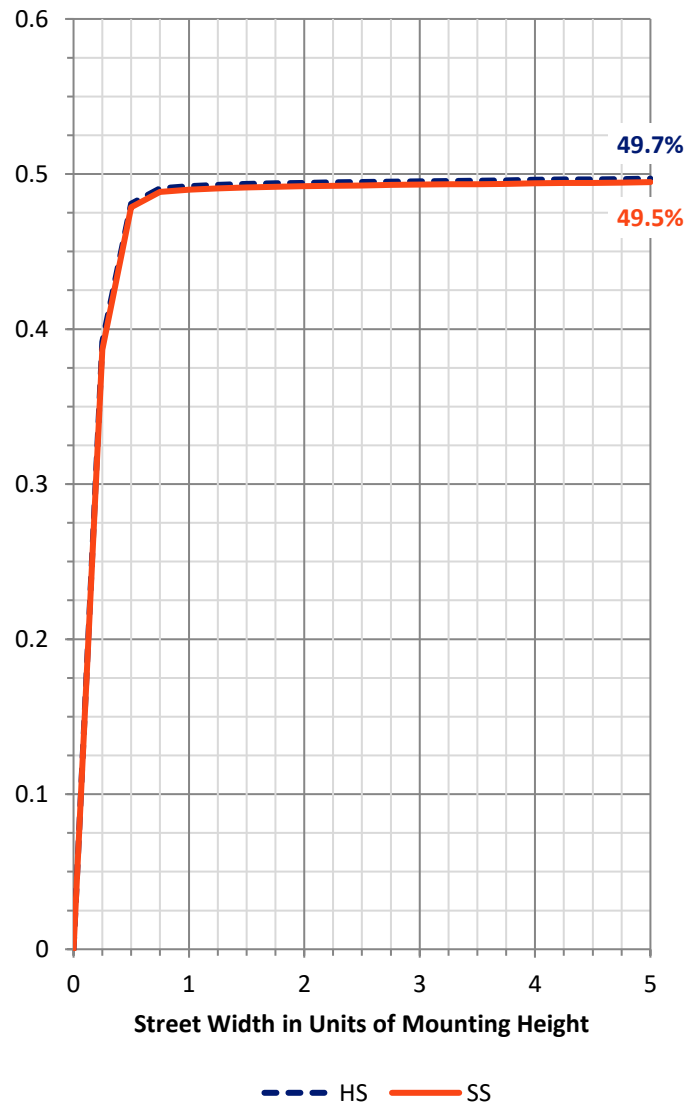
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1429.3	0.0	1429.3
	% Fixture	50.6	0.0	50.6
Street Side	Lumens	1397.4	0.0	1397.4
	% Fixture	49.4	0.0	49.4
Total	Lumens	2826.7	0.0	2826.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1062.5	37.6
10°-20°	1131.9	40.0
20°-30°	518.5	18.3
30°-40°	99.4	3.5
40°-50°	13.3	0.5
50°-60°	6.6	0.2
60°-70°	5.3	0.2
70°-80°	13.0	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°	2826.7	100.0
0°-180°	2826.7	100.0



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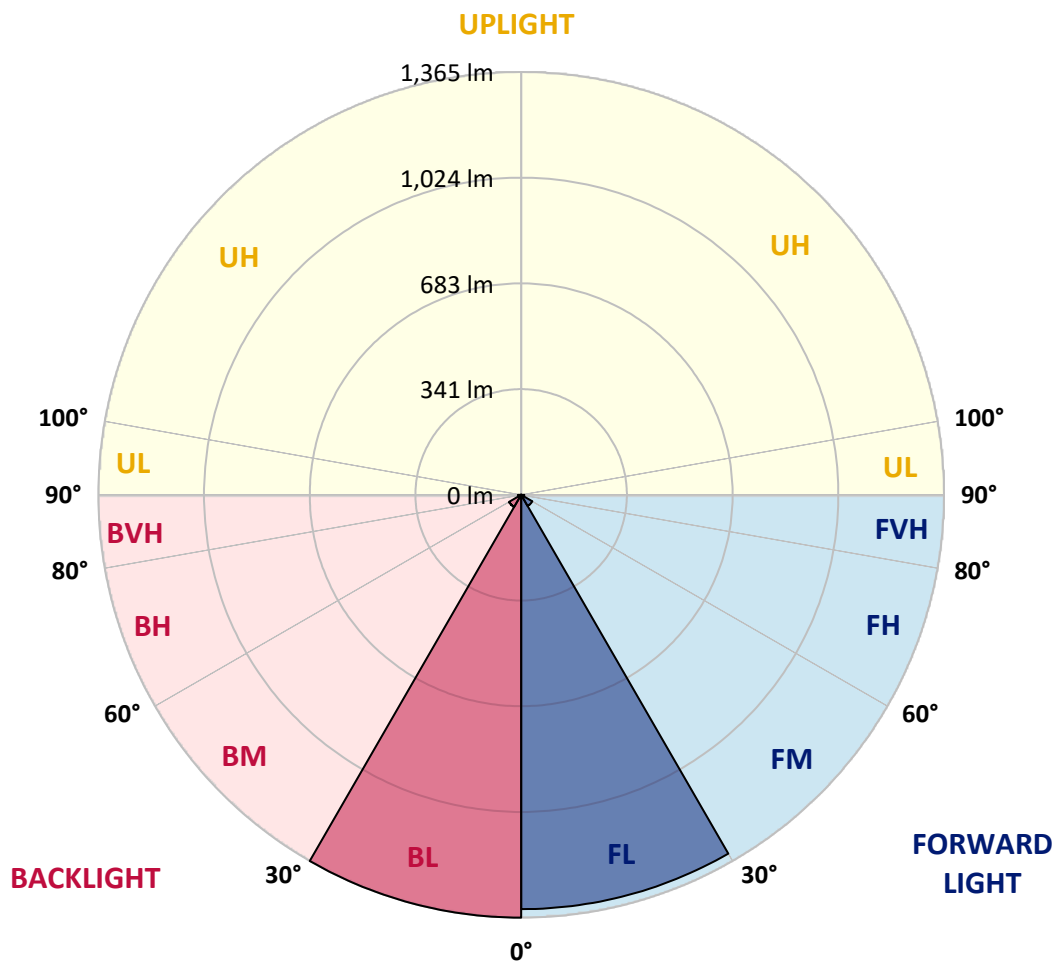
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1337.7	47.3			
FM	(30°-60°)	41.5	1.5			
FH	(60°-80°)	7.7	0.3			G0/660
FVH	(80°-90°)	10.3	0.4			G1/100
BL	(0°-30°)	1365.3	48.3	B3/2500		
BM	(30°-60°)	45.5	1.6	B0/220		
BH	(60°-80°)	7.9	0.3	B0/110		G0/660
BVH	(80°-90°)	10.4	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°	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4
1°	14391.1	14399.3	14414.7	14437.9	14469.1	14507.7	14552.7	14602.1	14653.7	14704.7	14643.3
3°	14054.2	14080.4	14113.9	14049.2	14021.7	14034.9	14088.3	14177.9	14201.4	14227.5	14213.1
5°	12908.0	13051.0	12963.5	12936.4	12972.2	12995.3	12997.1	13045.1	13177.2	13251.7	13242.1
7°	10928.4	11093.6	10908.7	10911.7	11054.5	11083.2	11011.1	11044.1	11175.0	11276.9	11248.7
9°	8334.9	8500.7	8563.9	8614.7	8600.4	8602.8	8660.6	8669.5	8560.3	8586.6	8584.7
11°	6766.7	6839.3	6774.4	6823.0	6864.7	6878.7	6885.1	6915.1	6983.6	7053.2	7020.9
13°	5291.4	5170.4	5158.0	5193.2	5203.1	5252.5	5284.8	5272.6	5257.0	5295.3	5280.3
15°	3783.2	3735.0	3804.4	3764.6	3825.9	3879.1	3798.7	3848.7	3790.5	3754.1	3796.6
17°	2923.5	2884.1	2900.1	2891.2	2916.8	2899.6	2912.3	2920.4	2924.7	2913.8	2929.1
19.5°	2180.1	2144.6	2169.7	2148.3	2159.6	2157.5	2170.6	2191.7	2188.7	2226.5	2194.0
22.5°	1527.6	1516.4	1530.0	1541.9	1527.6	1548.7	1548.8	1553.7	1565.4	1567.3	1577.2
25.5°	983.5	967.1	978.4	985.9	993.9	1009.0	1010.1	1020.0	1018.3	1020.3	1031.0
29°	435.6	431.3	452.5	432.2	454.3	450.4	467.6	485.8	461.4	449.2	468.6
33°	80.3	91.5	123.0	90.8	111.6	108.4	118.5	132.9	105.6	79.4	108.3
37.5°	26.1	30.6	33.6	30.9	30.0	28.9	29.1	28.6	27.4	23.2	27.8
42.5°	22.3	23.6	25.4	24.8	22.6	20.2	18.1	17.6	17.4	17.4	17.4
47.5°	11.6	14.6	18.2	16.3	14.5	11.8	9.5	9.4	8.6	8.7	8.6
55°	2.9	7.7	10.0	8.2	6.1	3.6	2.2	1.0	1.3	0.0	1.8
65°	1.9	8.7	7.8	5.7	4.1	2.9	1.8	2.3	2.6	1.9	2.8
75°	1.0	7.7	5.1	4.1	6.4	7.5	9.7	10.7	13.7	11.6	13.7
85°	0.0	4.4	15.0	28.1	34.9	36.8	37.4	40.1	40.2	43.6	40.2
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):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4
1°	14583.9	14531.4	14489.7	14461.3	14447.1	14446.2	14456.4	14474.3	14456.4	14446.2	14447.1
3°	14196.7	14138.4	14108.4	14110.3	14143.8	14205.5	14269.8	14343.6	14269.8	14205.5	14143.8
5°	13148.0	13140.9	13188.2	13227.0	13213.5	13222.6	13328.7	13493.7	13328.7	13222.6	13213.5
7°	11177.0	11175.1	11258.0	11285.2	11294.4	11375.1	11523.2	11685.4	11523.2	11375.1	11294.4
9°	8734.7	8779.0	8735.3	8722.3	8807.6	8867.9	8741.3	8844.1	8741.3	8867.9	8807.6
11°	6967.9	6945.3	6958.3	6947.5	6896.5	6932.4	6989.9	7088.1	6989.9	6932.4	6896.5
13°	5313.1	5310.9	5283.5	5253.4	5232.7	5210.1	5217.1	5346.6	5217.1	5210.1	5232.7
15°	3865.8	3820.9	3878.9	3860.2	3804.5	3849.3	3816.0	3720.2	3816.0	3849.3	3804.5
17°	2931.9	2950.1	2949.4	2957.0	2959.2	2969.9	2982.5	3004.8	2982.5	2969.9	2959.2
19.5°	2207.0	2215.4	2219.8	2226.6	2223.1	2241.5	2239.5	2272.0	2239.5	2241.5	2223.1
22.5°	1575.7	1582.8	1599.7	1602.4	1612.7	1618.0	1621.1	1614.7	1621.1	1618.0	1612.7
25.5°	1042.3	1041.9	1050.4	1065.3	1070.4	1073.3	1068.6	1067.8	1068.6	1073.3	1070.4
29°	501.3	491.3	488.1	505.8	501.4	515.8	503.2	495.6	503.2	515.8	501.4
33°	140.4	132.2	127.0	133.2	117.7	145.4	117.8	104.5	117.8	145.4	117.7
37.5°	29.1	31.6	32.2	32.5	33.1	37.4	33.3	27.1	33.3	37.4	33.1
42.5°	17.9	19.1	21.2	23.2	24.8	25.2	23.6	21.3	23.6	25.2	24.8
47.5°	10.4	10.5	12.9	14.9	16.9	17.6	15.3	11.6	15.3	17.6	16.9
55°	1.6	2.6	4.3	6.1	8.4	9.9	7.7	2.9	7.7	9.9	8.4
65°	3.0	2.4	2.9	4.1	5.9	7.8	8.7	1.9	8.7	7.8	5.9
75°	10.7	10.0	8.5	6.4	4.1	5.1	7.7	1.0	7.7	5.1	4.1
85°	40.6	38.1	37.2	35.7	28.1	15.0	4.4	0.0	4.4	15.0	28.1
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°	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4	14594.4
1°	14461.3	14489.7	14531.4	14583.9	14643.3	14704.7	14653.7	14602.1	14552.7	14507.7	14469.1
3°	14110.3	14108.4	14138.4	14196.7	14213.1	14227.5	14201.4	14177.9	14088.3	14034.9	14021.7
5°	13227.0	13188.2	13140.9	13148.0	13242.1	13251.7	13177.2	13045.1	12997.1	12995.3	12972.2
7°	11285.2	11258.0	11175.1	11177.0	11248.7	11276.9	11175.0	11044.1	11011.1	11083.2	11054.5
9°	8722.3	8735.3	8779.0	8734.7	8584.7	8586.6	8560.3	8669.5	8660.6	8602.8	8600.4
11°	6947.5	6958.3	6945.3	6967.9	7020.9	7053.2	6983.6	6915.1	6885.1	6878.7	6864.7
13°	5253.4	5283.5	5310.9	5313.1	5280.3	5295.3	5257.0	5272.6	5284.8	5252.5	5203.1
15°	3860.2	3878.9	3820.9	3865.8	3796.6	3754.1	3790.5	3848.7	3798.7	3879.1	3825.9
17°	2957.0	2949.4	2950.1	2931.9	2929.1	2913.8	2924.7	2920.4	2912.3	2899.6	2916.8
19.5°	2226.6	2219.8	2215.4	2207.0	2194.0	2226.5	2188.7	2191.7	2170.6	2157.5	2159.6
22.5°	1602.4	1599.7	1582.8	1575.7	1577.2	1567.3	1565.4	1553.7	1548.8	1548.7	1527.6
25.5°	1065.3	1050.4	1041.9	1042.3	1031.0	1020.3	1018.3	1020.0	1010.1	1009.0	993.9
29°	505.8	488.1	491.3	501.3	468.6	449.2	461.4	485.8	467.6	450.4	454.3
33°	133.2	127.0	132.2	140.4	108.3	79.4	105.6	132.9	118.5	108.4	111.6
37.5°	32.5	32.2	31.6	29.1	27.8	23.2	27.4	28.6	29.1	28.9	30.0
42.5°	23.2	21.2	19.1	17.9	17.4	17.4	17.4	17.6	18.1	20.2	22.6
47.5°	14.9	12.9	10.5	10.4	8.6	8.7	8.6	9.4	9.5	11.8	14.5
55°	6.1	4.3	2.6	1.6	1.8	0.0	1.3	1.0	2.2	3.6	6.1
65°	4.1	2.9	2.4	3.0	2.8	1.9	2.6	2.3	1.8	2.9	4.1
75°	6.4	8.5	10.0	10.7	13.7	11.6	13.7	10.7	9.7	7.5	6.4
85°	35.7	37.2	38.1	40.6	40.2	43.6	40.2	40.1	37.4	36.8	34.9
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):

	330°	340°	350°	360°
0°	14594.4	14594.4	14594.4	14594.4
1°	14437.9	14414.7	14399.3	14391.1
3°	14049.2	14113.9	14080.4	14054.2
5°	12936.4	12963.5	13051.0	12908.0
7°	10911.7	10908.7	11093.6	10928.4
9°	8614.7	8563.9	8500.7	8334.9
11°	6823.0	6774.4	6839.3	6766.7
13°	5193.2	5158.0	5170.4	5291.4
15°	3764.6	3804.4	3735.0	3783.2
17°	2891.2	2900.1	2884.1	2923.5
19.5°	2148.3	2169.7	2144.6	2180.1
22.5°	1541.9	1530.0	1516.4	1527.6
25.5°	985.9	978.4	967.1	983.5
29°	432.2	452.5	431.3	435.6
33°	90.8	123.0	91.5	80.3
37.5°	30.9	33.6	30.6	26.1
42.5°	24.8	25.4	23.6	22.3
47.5°	16.3	18.2	14.6	11.6
55°	8.2	10.0	7.7	2.9
65°	5.7	7.8	8.7	1.9
75°	4.1	5.1	7.7	1.0
85°	28.1	15.0	4.4	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)