

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: P232895

Luminaire Tested: **NFFLD-L-C150-D-UNV-66-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232895
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-236-2)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NFFLD-L-C150-D-UNV-66-7050
Description: LED FLOOD LIGHT LUMINAIRE
Light Source: (4) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44017.7 lumens
Efficiency: N/A
Efficacy: 139.3 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): 316
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

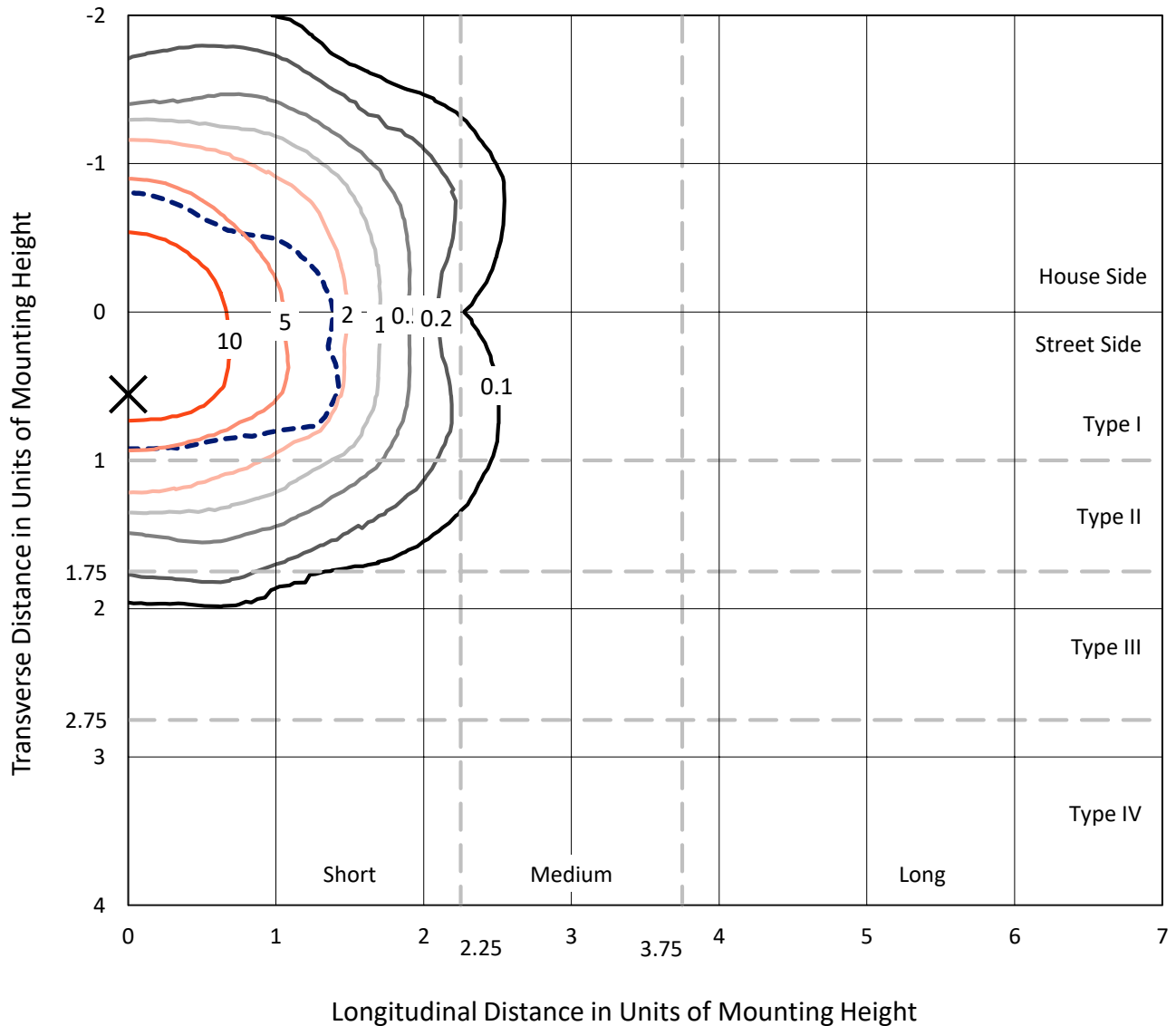


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Iso-Footcandle Lines of Horizontal Illumination

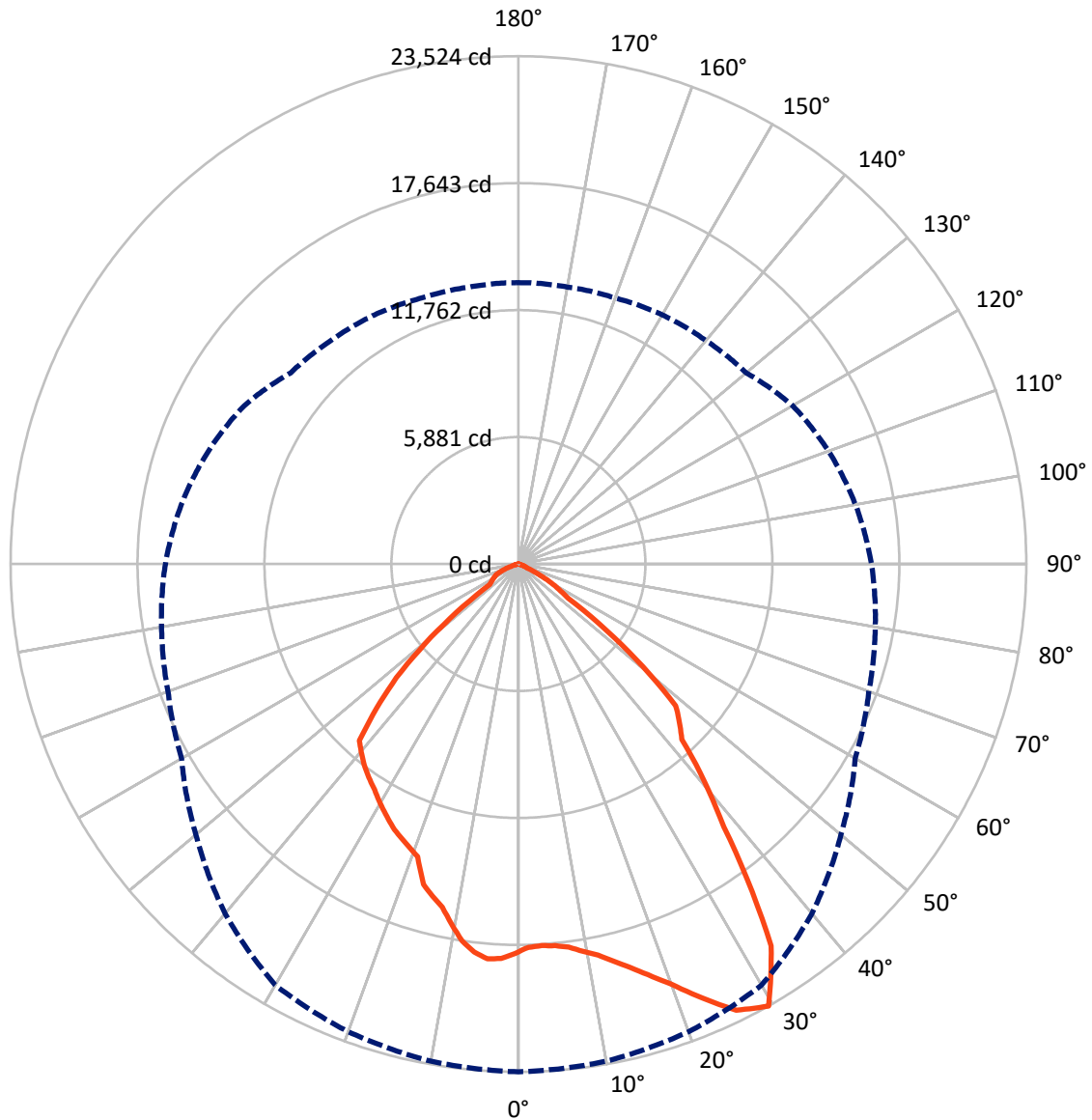
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 19.9 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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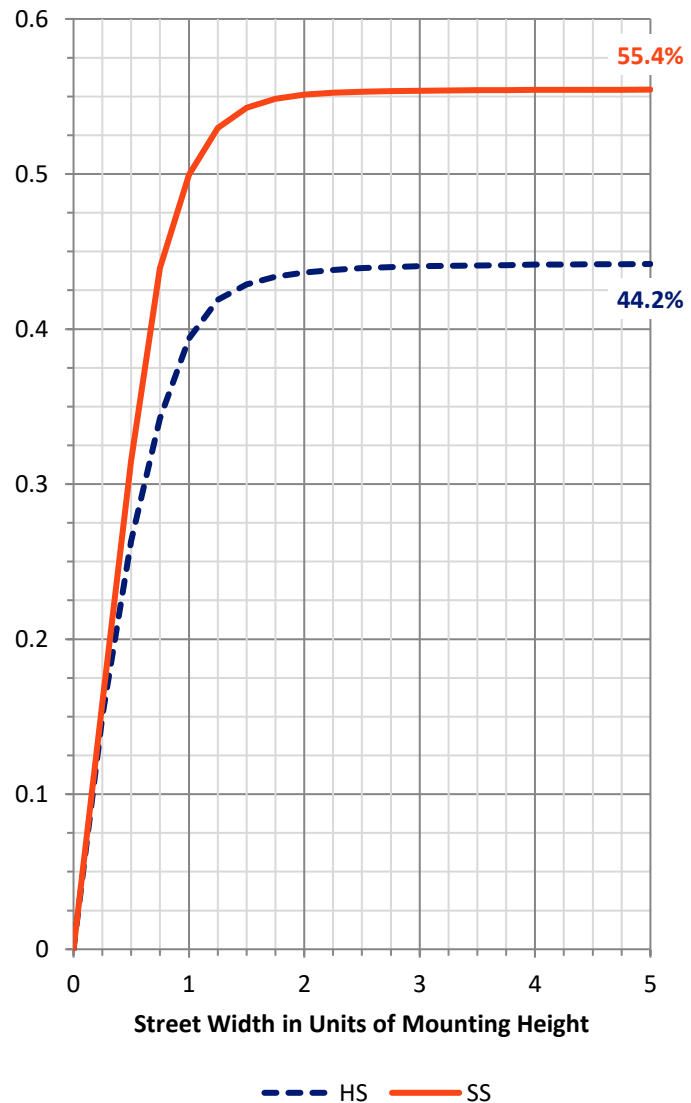
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	19623.7	0.0	19623.7
	% Fixture	44.6	0.0	44.6
Street Side	Lumens	24393.9	0.0	24393.9
	% Fixture	55.4	0.0	55.4
Total	Lumens	44017.7	0.0	44017.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1712.9	3.9
10°-20°	4987.9	11.3
20°-30°	8009.0	18.2
30°-40°	9869.9	22.4
40°-50°	9669.6	22.0
50°-60°	6776.8	15.4
60°-70°	2898.3	6.6
70°-80°	647.6	1.5
80°-90°	80.0	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°	44017.7	100.0
0°-180°	44017.7	100.0



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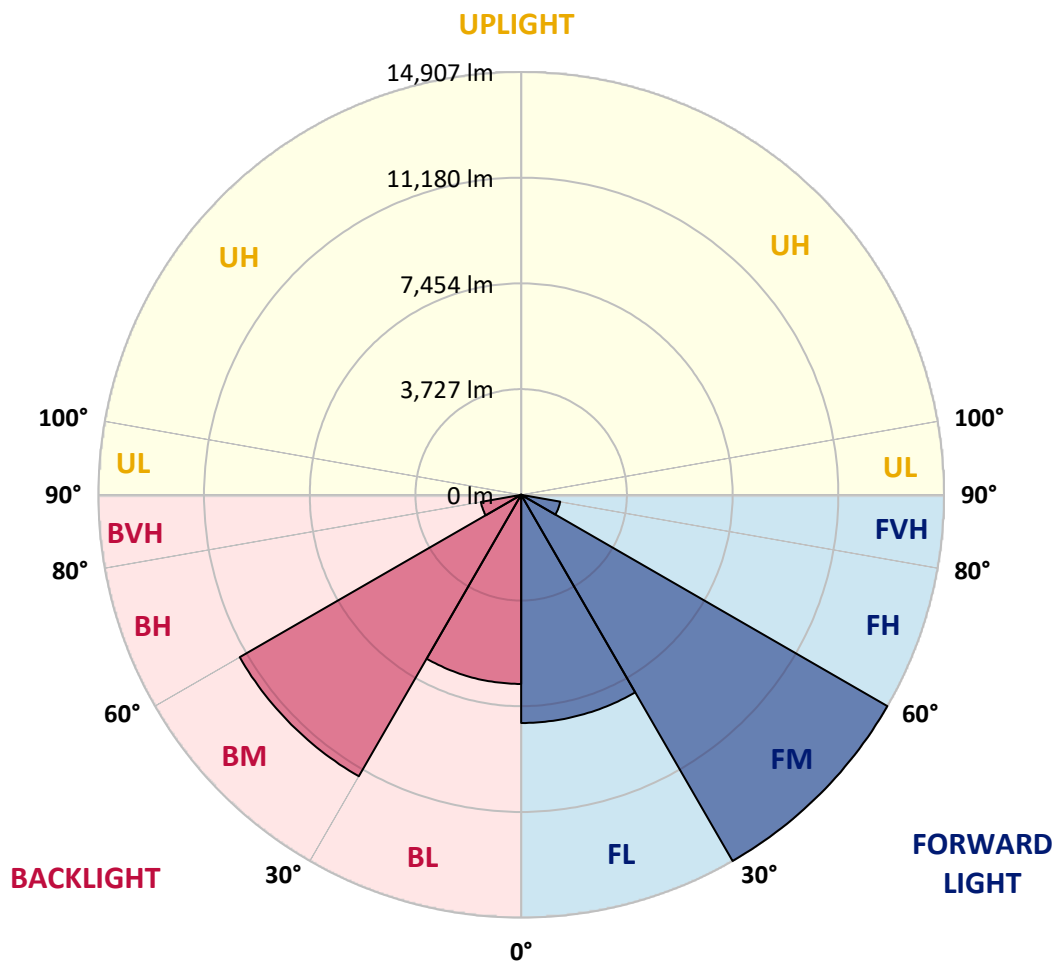
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	8043.3	18.3			
FM	(30°-60°)	14907.3	33.9			
FH	(60°-80°)	1394.4	3.2			G1/1800
FVH	(80°-90°)	29.7	0.1			G1/100
BL	(0°-30°)	6668.0	15.1	B5		
BM	(30°-60°)	11456.0	26.0	B5		
BH	(60°-80°)	1441.2	3.3	B3/2500		G3/2500
BVH	(80°-90°)	42.6	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°	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4
1°	17762.2	17759.4	17760.5	17765.8	17775.2	17788.5	17805.4	17825.1	17847.0	17870.3	17896.8
3°	17708.6	17698.2	17691.0	17700.8	17713.8	17729.6	17748.0	17768.0	17837.1	17909.6	17979.0
5°	17758.1	17734.5	17730.9	17728.0	17721.0	17712.3	17733.2	17771.5	17823.9	17944.0	18049.5
7°	17901.6	17895.5	17865.4	17824.3	17772.4	17736.1	17725.6	17755.9	17819.2	17944.0	18079.8
9°	18188.4	18141.2	18078.3	17986.9	17865.4	17774.2	17714.2	17726.5	17813.3	17960.1	18076.1
11°	18491.4	18448.0	18356.3	18204.1	18015.5	17830.8	17720.4	17719.8	17817.9	17975.3	18056.7
13°	18920.7	18845.5	18698.3	18463.7	18198.5	17939.8	17744.1	17716.5	17841.1	17975.3	17967.7
15°	19392.4	19325.3	19116.7	18798.9	18419.8	18062.2	17798.6	17711.5	17839.7	17921.8	17833.4
17°	19944.9	19850.8	19585.7	19182.3	18672.8	18194.2	17849.5	17719.5	17848.4	17874.3	17701.2
19.5°	20707.6	20586.5	20240.6	19707.1	19045.1	18396.5	17918.6	17678.9	17771.4	17724.8	17388.8
22.5°	21837.8	21645.3	21179.7	20451.5	19641.5	18741.4	17950.6	17599.5	17708.1	17866.2	17107.8
25.5°	22996.4	22787.4	22243.2	21382.3	20350.6	19162.9	18044.3	17453.3	17254.4	17034.9	16514.9
29°	23523.6	23383.9	23051.5	22521.1	21139.1	19499.4	18012.1	17268.6	16784.2	16353.1	15854.5
33°	21216.6	21329.0	21870.3	22766.9	21773.3	19824.0	18036.9	17159.5	16267.3	15560.2	15048.9
37.5°	15451.1	15822.4	17323.6	19581.9	20772.1	20088.7	18214.2	17125.4	15724.9	14872.3	14261.6
42.5°	11100.7	11422.7	12370.5	13794.1	16355.5	18702.6	18473.6	17109.5	15131.7	14450.1	13740.7
47.5°	9806.8	9726.2	9894.6	10050.3	11401.5	14773.0	17946.5	16768.4	14244.9	13722.9	13337.1
55°	2789.8	3375.5	4564.8	5668.6	7327.5	8495.4	12986.8	13072.5	11064.8	11422.9	10913.3
65°	466.7	490.3	1001.1	986.4	1472.5	2492.5	3287.4	3478.0	2589.2	1516.1	2659.2
75°	61.6	79.3	116.7	104.1	111.0	89.1	233.8	200.9	292.9	360.6	417.6
85°	0.0	46.0	47.4	51.1	50.8	51.4	61.9	71.4	73.1	87.9	91.8
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°	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4
1°	17923.2	17948.6	17972.4	17993.9	18012.5	18027.6	18038.6	18045.0	18038.6	18027.6	18012.5
3°	18045.3	18102.1	18153.7	18198.9	18236.2	18264.4	18281.7	18286.4	18281.7	18264.4	18236.2
5°	18139.4	18225.2	18282.0	18284.2	18289.4	18298.8	18314.5	18348.0	18314.5	18298.8	18289.4
7°	18179.7	18232.0	18240.0	18206.6	18132.9	18091.7	18080.7	18089.4	18080.7	18091.7	18132.9
9°	18167.7	18134.1	18029.5	17929.8	17794.2	17700.6	17655.0	17651.1	17655.0	17700.6	17794.2
11°	18046.4	17930.9	17730.8	17482.9	17286.0	17105.4	17000.6	16971.3	17000.6	17105.4	17286.0
13°	17852.5	17593.1	17277.9	16977.7	16690.0	16483.1	16326.3	16275.3	16326.3	16483.1	16690.0
15°	17593.9	17186.3	16817.7	16496.5	16189.0	16033.5	15919.4	15893.5	15919.4	16033.5	16189.0
17°	17302.4	16837.6	16446.2	16102.8	15875.4	15644.3	15511.8	15472.3	15511.8	15644.3	15875.4
19.5°	16911.5	16481.7	16062.7	15745.1	15402.2	14788.0	14445.3	14333.0	14445.3	14788.0	15402.2
22.5°	16500.4	16054.6	15628.3	15079.7	14287.8	14060.8	13961.2	13936.0	13961.2	14060.8	14287.8
25.5°	16029.8	15515.6	15009.2	14156.3	13849.9	13675.0	13586.0	13579.5	13586.0	13675.0	13849.9
29°	15284.9	14666.8	13775.8	13509.8	13327.4	13111.6	13029.4	13034.0	13029.4	13111.6	13327.4
33°	14399.3	13622.3	12888.6	12761.4	12533.6	12421.1	12381.7	12402.7	12381.7	12421.1	12533.6
37.5°	13517.9	12658.4	12129.3	11842.4	11730.9	11759.6	11779.2	11805.8	11779.2	11759.6	11730.9
42.5°	12756.9	11944.1	11262.6	10954.8	10963.6	10928.8	10928.8	11014.9	10928.8	10928.8	10963.6
47.5°	12229.5	11398.9	10346.1	10037.6	9685.3	8625.5	7938.4	7726.1	7938.4	8625.5	9685.3
55°	10351.6	10194.1	8544.4	6687.8	4718.9	3120.7	2142.5	1614.1	2142.5	3120.7	4718.9
65°	3653.6	3092.3	1828.8	1354.9	1476.6	1269.4	1139.0	1122.2	1139.0	1269.4	1476.6
75°	415.1	339.3	325.0	254.4	322.1	259.2	180.7	159.6	180.7	259.2	322.1
85°	76.8	78.8	69.9	59.7	57.8	47.1	42.8	8.1	42.8	47.1	57.8
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°	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4	17884.4
1°	17993.9	17972.4	17948.6	17923.2	17896.8	17870.3	17847.0	17825.1	17805.4	17788.5	17775.2
3°	18198.9	18153.7	18102.1	18045.3	17979.0	17909.6	17837.1	17768.0	17748.0	17729.6	17713.8
5°	18284.2	18282.0	18225.2	18139.4	18049.5	17944.0	17823.9	17771.5	17733.2	17712.3	17721.0
7°	18206.6	18240.0	18232.0	18179.7	18079.8	17944.0	17819.2	17755.9	17725.6	17736.1	17772.4
9°	17929.8	18029.5	18134.1	18167.7	18076.1	17960.1	17813.3	17726.5	17714.2	17774.2	17865.4
11°	17482.9	17730.8	17930.9	18046.4	18056.7	17975.3	17817.9	17719.8	17720.4	17830.8	18015.5
13°	16977.7	17277.9	17593.1	17852.5	17967.7	17975.3	17841.1	17716.5	17744.1	17939.8	18198.5
15°	16496.5	16817.7	17186.3	17593.9	17833.4	17921.8	17839.7	17711.5	17798.6	18062.2	18419.8
17°	16102.8	16446.2	16837.6	17302.4	17701.2	17874.3	17848.4	17719.5	17849.5	18194.2	18672.8
19.5°	15745.1	16062.7	16481.7	16911.5	17388.8	17724.8	17771.4	17678.9	17918.6	18396.5	19045.1
22.5°	15079.7	15628.3	16054.6	16500.4	17107.8	17866.2	17708.1	17599.5	17950.6	18741.4	19641.5
25.5°	14156.3	15009.2	15515.6	16029.8	16514.9	17034.9	17254.4	17453.3	18044.3	19162.9	20350.6
29°	13509.8	13775.8	14666.8	15284.9	15854.5	16353.1	16784.2	17268.6	18012.1	19499.4	21139.1
33°	12761.4	12888.6	13622.3	14399.3	15048.9	15560.2	16267.3	17159.5	18036.9	19824.0	21773.3
37.5°	11842.4	12129.3	12658.4	13517.9	14261.6	14872.3	15724.9	17125.4	18214.2	20088.7	20772.1
42.5°	10954.8	11262.6	11944.1	12756.9	13740.7	14450.1	15131.7	17109.5	18473.6	18702.6	16355.5
47.5°	10037.6	10346.1	11398.9	12229.5	13337.1	13722.9	14244.9	16768.4	17946.5	14773.0	11401.5
55°	6687.8	8544.4	10194.1	10351.6	10913.3	11422.9	11064.8	13072.5	12986.8	8495.4	7327.5
65°	1354.9	1828.8	3092.3	3653.6	2659.2	1516.1	2589.2	3478.0	3287.4	2492.5	1472.5
75°	254.4	325.0	339.3	415.1	417.6	360.6	292.9	200.9	233.8	89.1	111.0
85°	59.7	69.9	78.8	76.8	91.8	87.9	73.1	71.4	61.9	51.4	50.8
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°	17884.4	17884.4	17884.4	17884.4
1°	17765.8	17760.5	17759.4	17762.2
3°	17700.8	17691.0	17698.2	17708.6
5°	17728.0	17730.9	17734.5	17758.1
7°	17824.3	17865.4	17895.5	17901.6
9°	17986.9	18078.3	18141.2	18188.4
11°	18204.1	18356.3	18448.0	18491.4
13°	18463.7	18698.3	18845.5	18920.7
15°	18798.9	19116.7	19325.3	19392.4
17°	19182.3	19585.7	19850.8	19944.9
19.5°	19707.1	20240.6	20586.5	20707.6
22.5°	20451.5	21179.7	21645.3	21837.8
25.5°	21382.3	22243.2	22787.4	22996.4
29°	22521.1	23051.5	23383.9	23523.6
33°	22766.9	21870.3	21329.0	21216.6
37.5°	19581.9	17323.6	15822.4	15451.1
42.5°	13794.1	12370.5	11422.7	11100.7
47.5°	10050.3	9894.6	9726.2	9806.8
55°	5668.6	4564.8	3375.5	2789.8
65°	986.4	1001.1	490.3	466.7
75°	104.1	116.7	79.3	61.6
85°	51.1	47.4	46.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)