

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: McGRAW-EDISON

Report Number: P300777

Luminaire Tested: **GLNA-AF-10-LED-E1-AFL-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300777
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-10-LED-E1-AFL-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28864.4 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 323
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

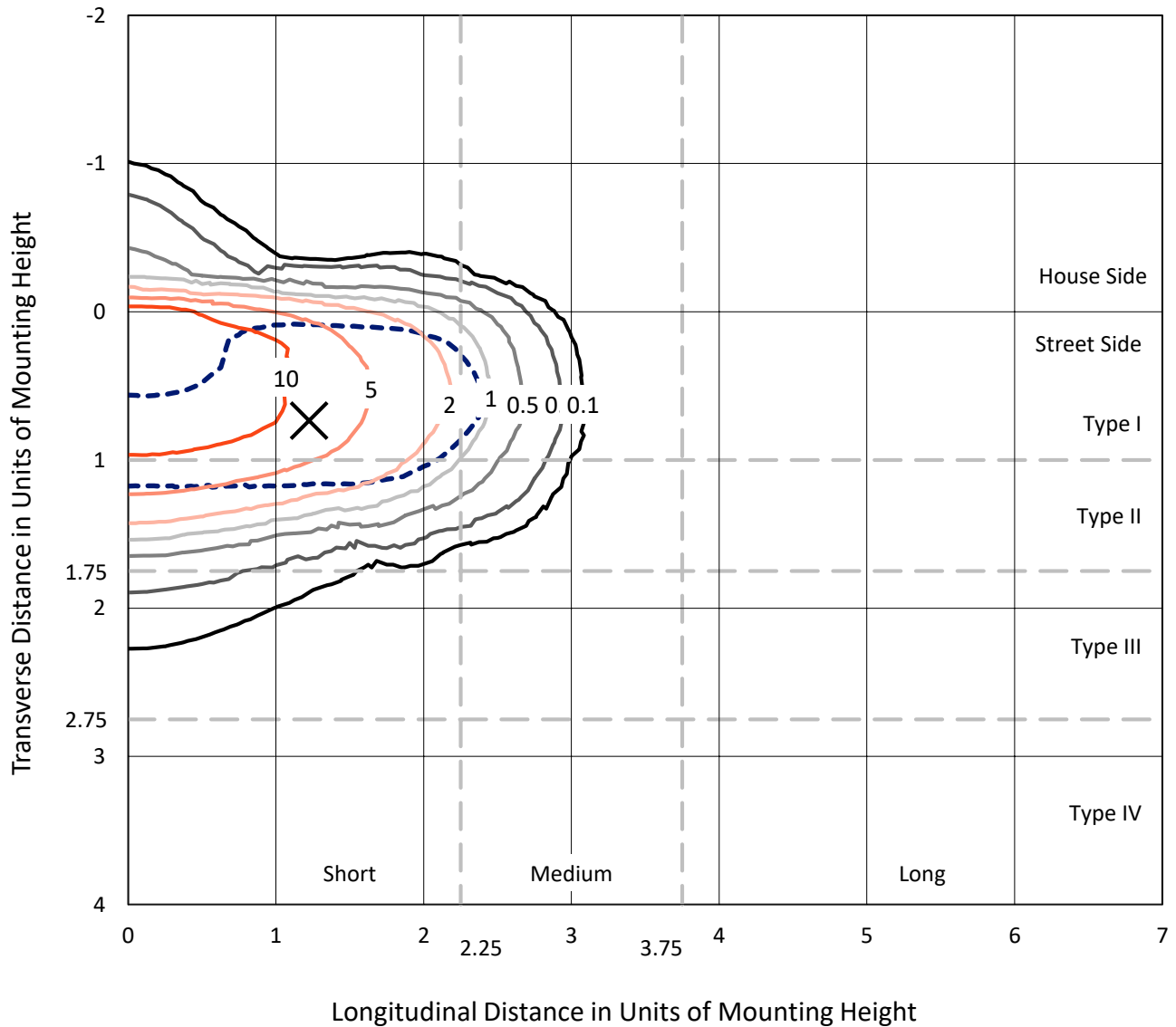


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

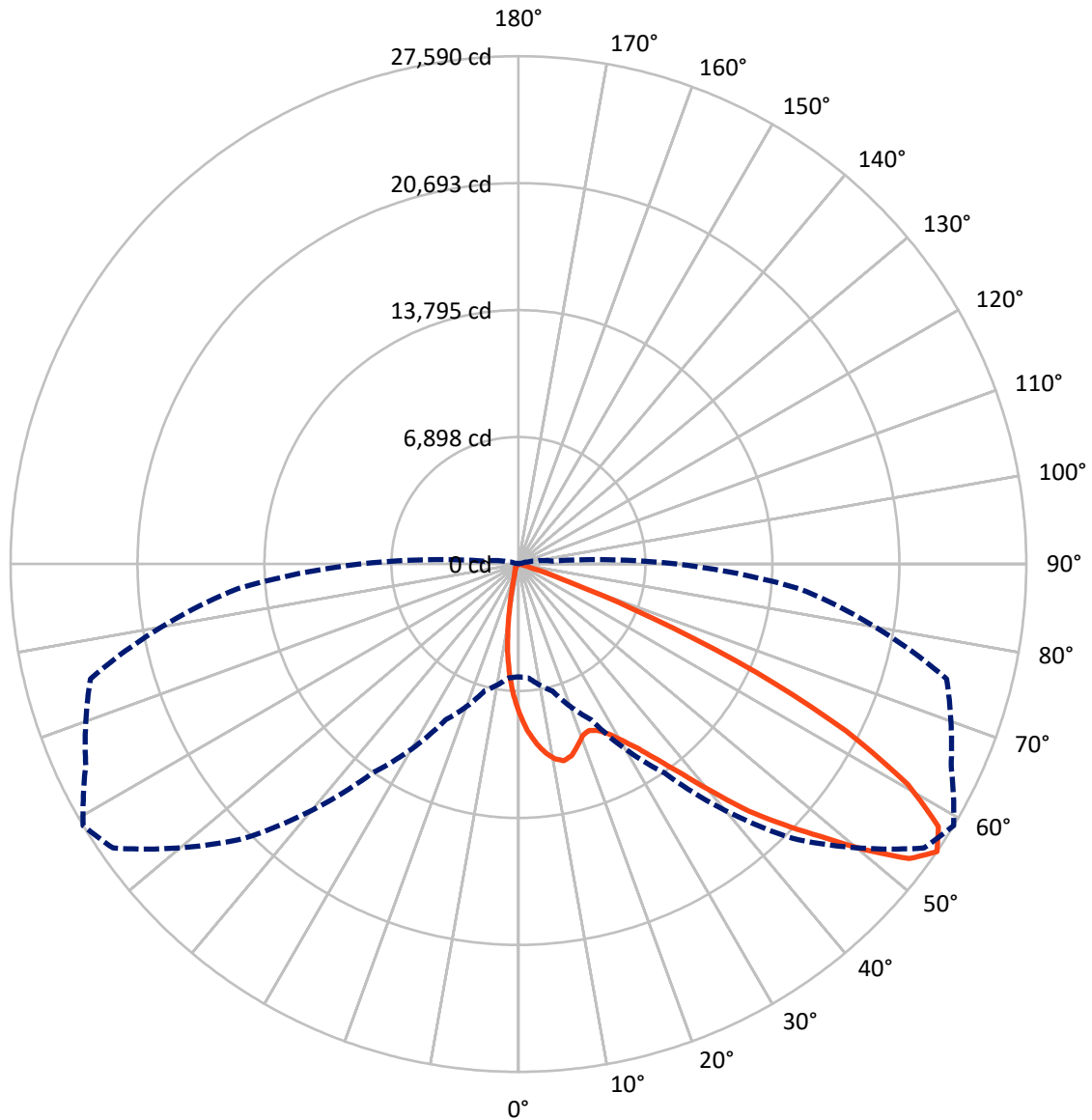


Based on 25 foot mounting height. Maximum calculated value = 16.2 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1612.2	0.0	1612.2
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	27252.2	0.0	27252.2
	% Fixture	94.4	0.0	94.4
Total	Lumens	28864.4	0.0	28864.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	680.6	2.4
10°-20°	1629.5	5.6
20°-30°	2772.8	9.6
30°-40°	4768.5	16.5
40°-50°	7362.1	25.5
50°-60°	7401.3	25.6
60°-70°	3795.4	13.1
70°-80°	411.3	1.4
80°-90°	43.0	0.1
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°	28864.4	100.0
0°-180°	28864.4	100.0

Coefficient of Utilization



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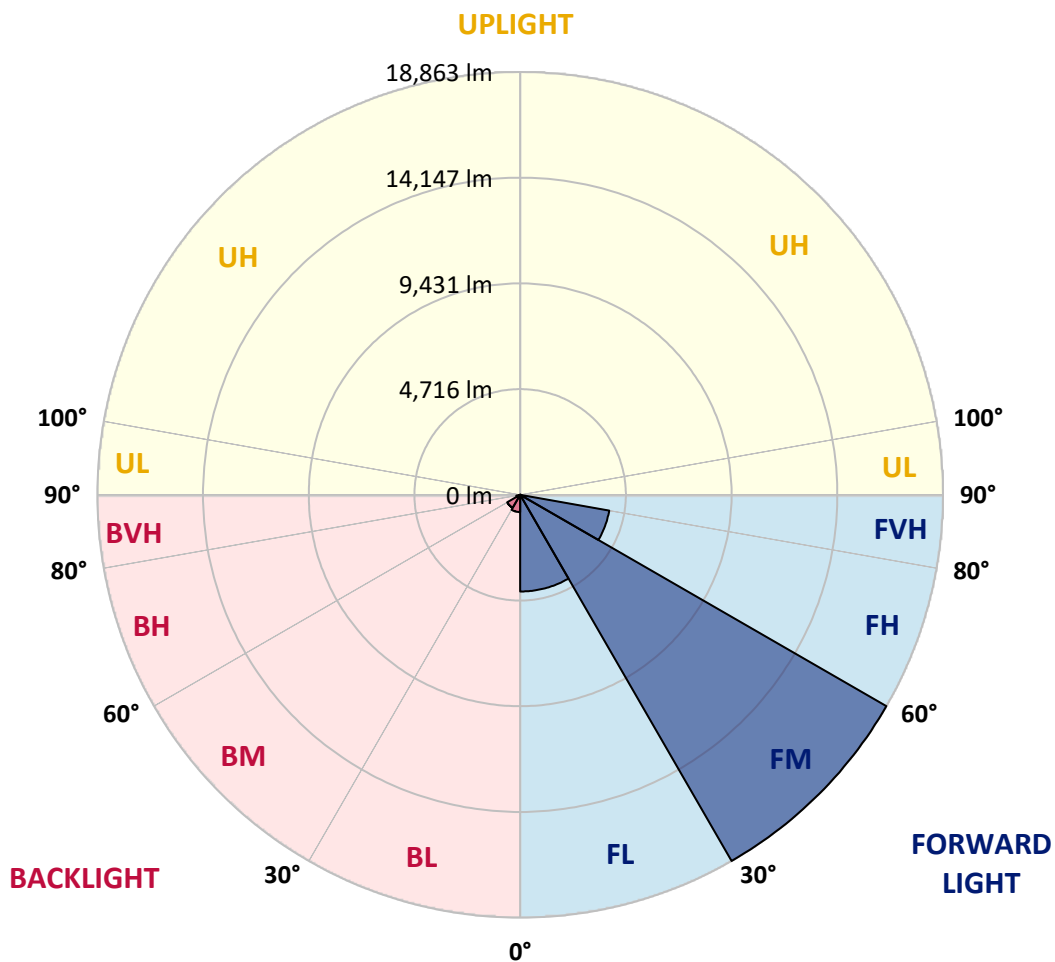
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4313.3	14.9			
FM	(30°-60°)	18862.8	65.3			
FH	(60°-80°)	4034.0	14.0			G2/5000
FVH	(80°-90°)	42.1	0.1			G1/100
BL	(0°-30°)	769.5	2.7	B2/1000		
BM	(30°-60°)	669.1	2.3	B1/1000		
BH	(60°-80°)	172.7	0.6	B1/500		G1/500
BVH	(80°-90°)	0.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	8125.2	8125.2	8125.2	8125.2	8125.2	8125.2	8125.2	8125.2	8125.2	8125.2	8125.2
2.5°	9614.0	9511.8	9481.1	9460.7	9367.0	9249.5	9089.4	9014.4	8861.1	8614.1	8310.9
5°	10494.7	10475.9	10407.8	10370.3	10269.8	10102.9	9847.4	9724.7	9481.1	9065.5	8522.1
7.5°	10109.7	10227.2	10320.9	10477.6	10675.2	10668.4	10453.8	10326.0	10053.5	9505.0	8757.2
10°	8622.6	8718.0	8871.3	9227.3	9953.0	10593.5	10845.6	10753.6	10535.5	9908.7	8983.7
12.5°	8331.3	8321.1	8348.4	8452.3	8832.1	9745.2	10779.1	10964.8	10920.5	10278.3	9198.4
15°	8486.4	8474.4	8471.0	8506.8	8598.8	8983.7	10280.0	10813.2	11155.6	10620.7	9380.6
17.5°	8920.7	8869.6	8842.4	8813.4	8786.2	8881.5	9680.4	10389.1	11191.4	10920.5	9532.2
20°	9665.1	9579.9	9479.4	9315.9	9162.6	9114.9	9428.3	9953.0	11063.6	11148.8	9631.0
22.5°	10600.3	10491.3	10317.5	10019.4	9707.7	9527.1	9552.7	9815.0	10872.8	11397.5	9677.0
25°	11651.3	11511.6	11279.9	10866.0	10407.8	10087.6	9920.6	10012.6	10785.9	11688.8	9729.8
27.5°	12777.2	12622.2	12319.0	11755.2	11235.6	10803.0	10462.3	10450.4	10934.1	12070.3	9815.0
30°	13893.0	13869.1	13473.9	12877.7	12189.6	11663.2	11172.6	11109.6	11348.1	12598.4	9983.6
32.5°	15381.7	15202.9	14719.1	14105.9	13312.1	12680.1	12099.3	11952.8	11983.4	13213.3	10244.3
35°	17258.9	17063.0	16381.6	15535.0	14647.6	13901.5	13259.3	13060.0	12985.0	14220.0	10683.7
37.5°	18471.7	18468.3	18040.7	17178.8	16226.6	15403.9	14705.5	14472.1	14320.5	15436.2	11365.1
40°	18504.1	18584.1	18640.3	18631.8	17953.9	17195.9	16575.8	16287.9	15935.3	17061.3	12245.8
42.5°	17511.0	17717.1	18212.8	19054.3	19456.3	19154.8	18631.8	18349.1	17824.4	18800.5	13318.9
45°	16168.7	16311.8	17178.8	18728.9	20270.5	21096.6	20698.1	20192.1	19500.6	20614.6	14281.3
47.5°	15567.4	15593.0	16153.4	17855.1	20331.8	22687.6	22929.5	22106.8	21023.4	22076.1	15034.2
50°	13770.3	13816.3	14589.6	16340.7	19613.0	23438.8	25171.2	24391.0	22684.2	23202.1	15308.5
52.5°	10378.8	10443.6	11424.7	13852.1	17637.0	23118.6	26775.8	26586.7	24503.5	23752.3	15323.8
55°	6123.7	6208.9	7145.8	9324.4	13872.5	21081.3	26895.0	27590.0	25939.4	24077.6	15300.0
57.5°	2860.0	2919.6	3456.2	4803.6	8627.7	16661.0	25099.6	26901.8	26731.5	24249.6	15468.6
60°	1519.4	1536.5	1665.9	2079.9	3899.1	10564.5	21595.7	24292.2	26009.3	24488.1	15674.7
62.5°	1161.7	1166.8	1160.0	1209.4	1638.7	4689.5	16323.7	19970.7	23101.6	24309.3	15446.5
65°	1006.7	1015.2	967.5	955.6	1051.0	1672.7	9697.5	14235.3	18153.2	21895.5	13891.3
67.5°	902.8	906.2	848.3	798.9	815.9	904.5	3825.8	7793.1	12015.8	16049.5	10068.8
70°	831.3	827.9	764.8	686.5	664.3	618.3	1216.2	2856.6	5742.2	8138.9	4682.7
72.5°	735.9	737.6	706.9	604.7	551.9	432.7	563.8	833.0	1713.6	2217.8	1097.0
75°	652.4	643.9	606.4	541.7	454.8	284.5	279.4	371.3	528.1	524.6	236.8
77.5°	471.8	463.3	475.2	444.6	349.2	184.0	139.7	178.9	214.6	207.8	66.4
80°	345.8	340.7	306.6	369.6	308.3	126.1	86.9	95.4	110.7	93.7	20.4
82.5°	236.8	235.1	216.3	204.4	175.5	76.7	54.5	59.6	71.5	52.8	10.2
85°	37.5	42.6	156.7	124.3	103.9	34.1	37.5	40.9	47.7	29.0	3.4
87.5°	0.0	0.0	73.2	64.7	20.4	13.6	22.1	23.8	23.8	15.3	0.0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8125.2	8125.2	8125.2	8125.2	8125.2	8125.2	8125.2	8125.2	8125.2	8125.2	8125.2
2.5°	8155.9	7985.6	7670.4	7345.1	7043.6	6684.2	6437.2	6251.5	6036.9	5978.9	6105.0
5°	8212.1	7890.2	7212.2	6474.6	5781.4	5013.1	4425.4	3960.4	3539.7	3396.6	3526.0
7.5°	8300.7	7822.0	6716.5	5502.0	4296.0	3096.8	2275.7	1735.8	1391.7	1289.5	1344.0
10°	8389.3	7723.2	6142.5	4350.5	2701.6	1507.5	981.2	783.6	710.3	695.0	703.5
12.5°	8462.5	7590.4	5442.4	3093.4	1444.5	807.4	642.2	609.8	599.6	599.6	603.0
15°	8506.8	7389.4	4612.8	1967.4	831.3	609.8	560.4	550.2	550.2	551.9	555.3
17.5°	8501.7	7133.9	3704.9	1190.7	621.7	540.0	511.0	502.5	500.8	504.2	505.9
20°	8438.7	6800.0	2793.6	785.3	541.7	492.3	463.3	448.0	446.3	449.7	453.1
22.5°	8319.4	6387.8	1998.1	604.7	488.9	446.3	410.5	396.9	396.9	400.3	403.7
25°	8174.6	5883.6	1366.1	512.7	441.2	396.9	362.8	350.9	354.3	362.8	364.5
27.5°	7994.1	5316.3	928.4	439.5	383.3	347.5	321.9	313.4	321.9	333.9	337.3
30°	7839.1	4725.2	662.6	379.9	325.3	299.8	284.5	284.5	296.4	318.5	323.6
32.5°	7719.8	4152.9	511.0	335.6	282.8	260.6	252.1	260.6	279.4	301.5	306.6
35°	7704.5	3681.1	432.7	299.8	252.1	230.0	226.6	241.9	260.6	277.7	281.1
37.5°	7822.0	3245.0	390.1	270.8	224.8	204.4	201.0	219.7	238.5	258.9	264.0
40°	8045.2	2902.6	359.4	243.6	202.7	180.6	173.7	187.4	212.9	240.2	247.0
42.5°	8334.8	2619.8	325.3	216.3	180.6	149.9	141.4	156.7	184.0	212.9	221.4
45°	8610.7	2376.2	287.9	185.7	151.6	115.8	112.4	132.9	146.5	175.5	182.3
47.5°	8762.3	2161.6	255.5	151.6	117.5	93.7	93.7	98.8	112.4	146.5	153.3
50°	8711.2	1989.6	221.4	112.4	81.8	71.5	71.5	69.8	90.3	117.5	122.6
52.5°	8609.0	1890.8	190.8	86.9	56.2	51.1	46.0	51.1	63.0	74.9	76.7
55°	8593.7	1873.7	160.1	69.8	39.2	34.1	25.6	25.6	25.6	23.8	20.4
57.5°	8712.9	1901.0	134.6	56.2	29.0	22.1	13.6	0.0	0.0	0.0	0.0
60°	8835.6	1930.0	115.8	39.2	20.4	11.9	1.7	0.0	0.0	0.0	0.0
62.5°	8631.1	1865.2	97.1	23.8	15.3	5.1	0.0	0.0	0.0	0.0	0.0
65°	7581.8	1587.6	76.7	17.0	10.2	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	5393.0	1062.9	51.1	10.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0
70°	2461.4	444.6	32.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	526.4	138.0	22.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	107.3	100.5	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	34.1	158.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	20.4	114.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	3.4	17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)