

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: P300645

Luminaire Tested: **GLNA-AF-08-LED-E1-AFL-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300645
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-08-LED-E1-AFL-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35477.5 lumens
Efficiency: N/A
Efficacy: 79.7 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

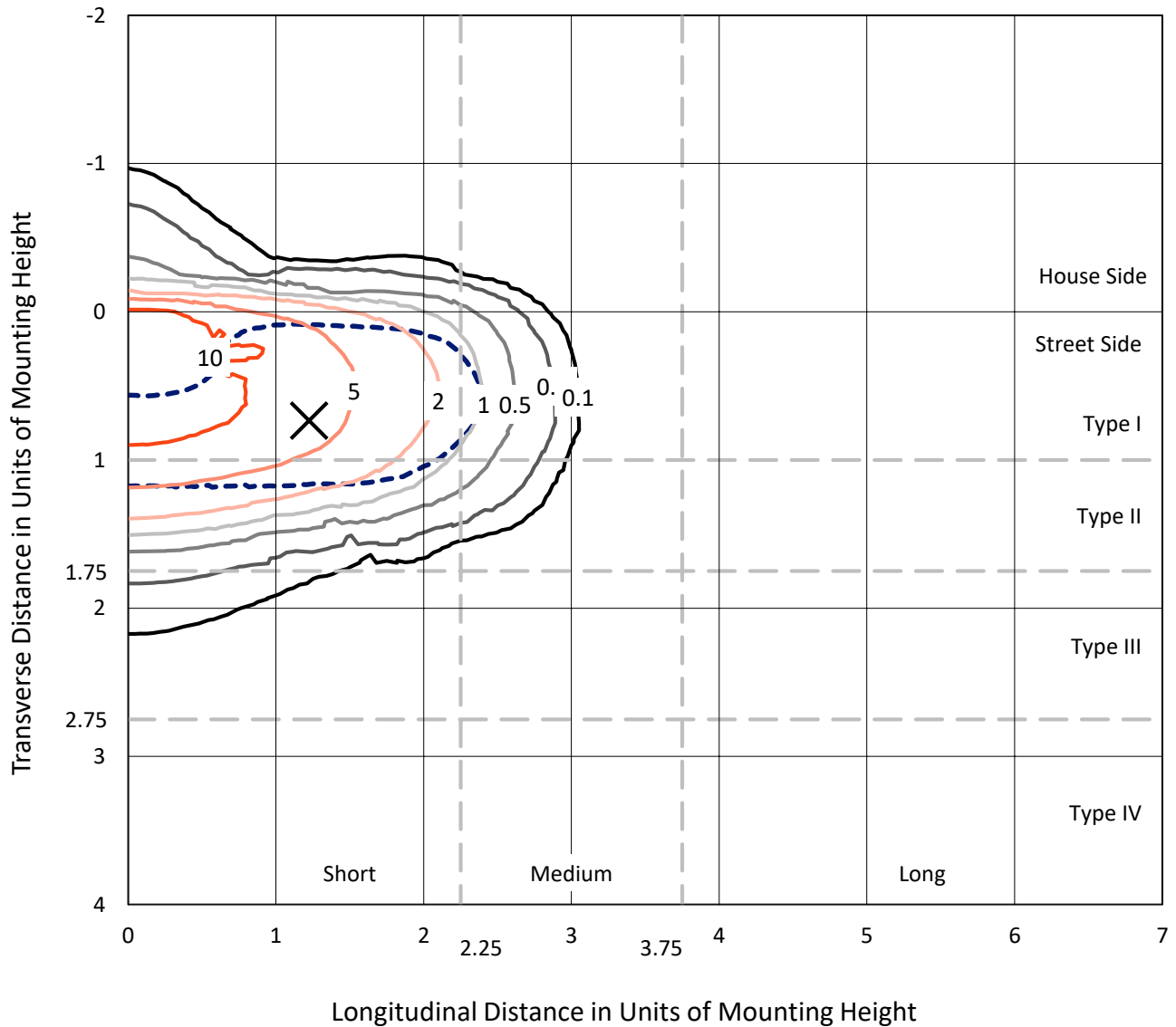
Input Watts (W): 445
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

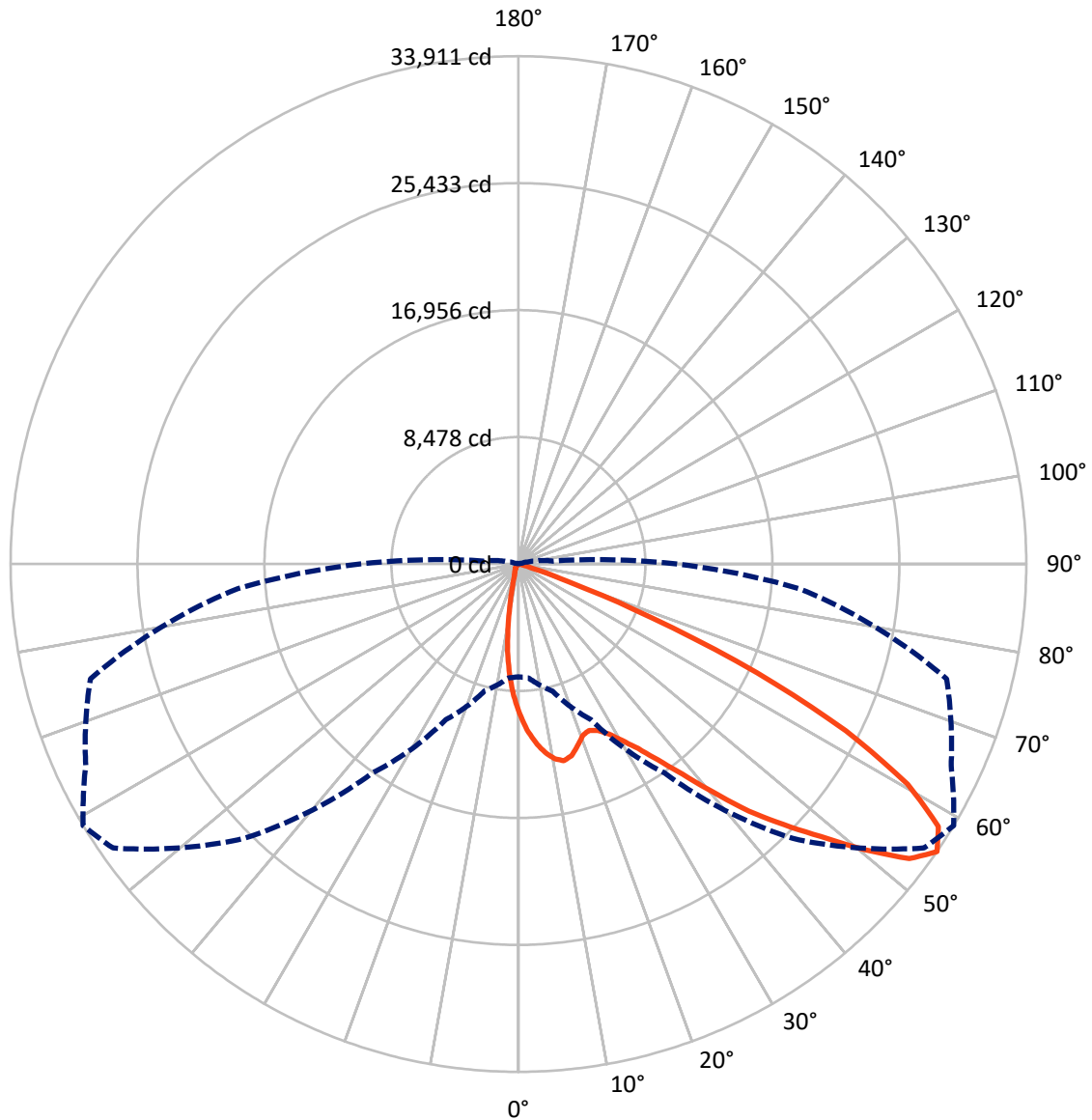
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.8 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	1981.6	0.0	1981.6
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	33495.9	0.0	33495.9
	% Fixture	94.4	0.0	94.4
Total	Lumens	35477.5	0.0	35477.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	836.5	2.4
10°-20°	2002.8	5.6
20°-30°	3408.0	9.6
30°-40°	5861.0	16.5
40°-50°	9048.8	25.5
50°-60°	9096.9	25.6
60°-70°	4665.0	13.1
70°-80°	505.5	1.4
80°-90°	52.8	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°	35477.5	100.0
0°-180°	35477.5	100.0

Coefficient of Utilization



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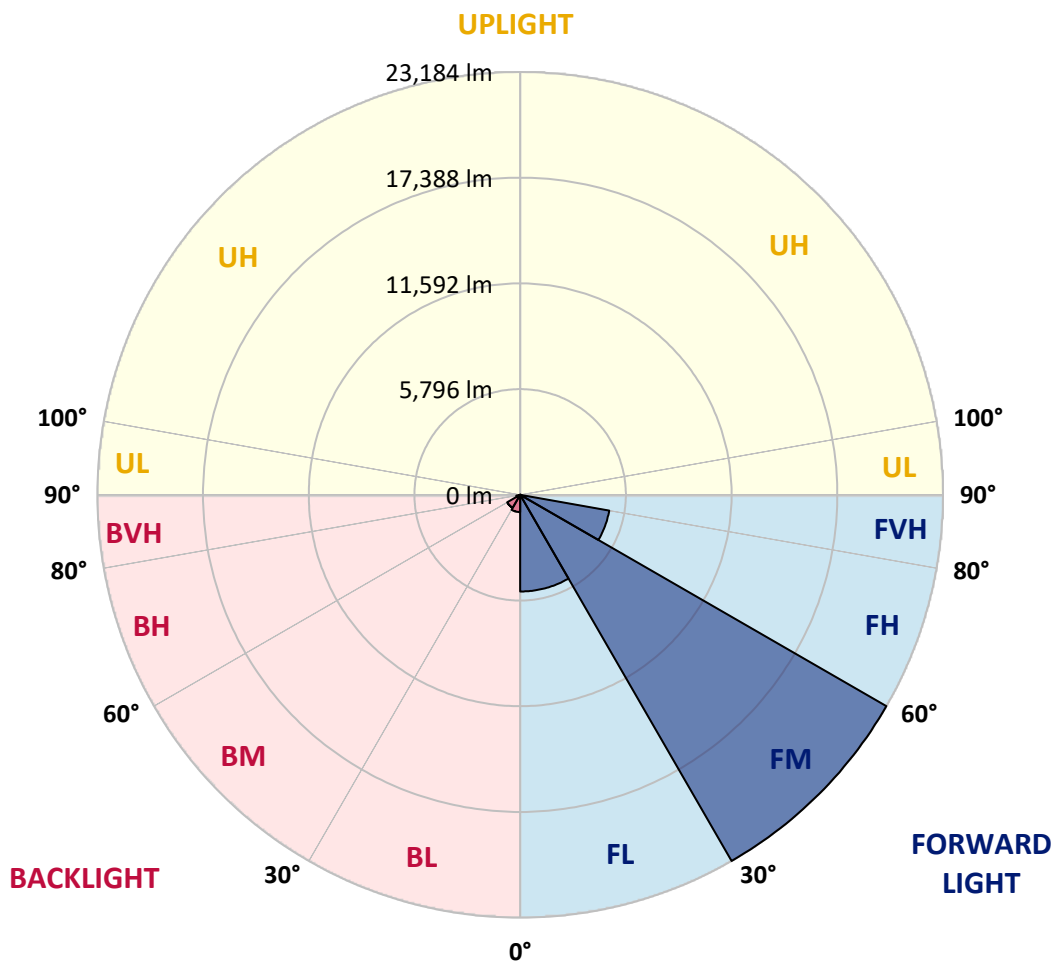
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5301.5	14.9			
FM	(30°-60°)	23184.4	65.3			
FH	(60°-80°)	4958.2	14.0			G2/5000
FVH	(80°-90°)	51.8	0.1			G1/100
BL	(0°-30°)	945.8	2.7	B2/1000		
BM	(30°-60°)	822.4	2.3	B1/1000		
BH	(60°-80°)	212.3	0.6	B1/500		G1/500
BVH	(80°-90°)	1.1	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°	9986.8	9986.8	9986.8	9986.8	9986.8	9986.8	9986.8	9986.8	9986.8	9986.8	9986.8
2.5°	11816.7	11691.0	11653.4	11628.2	11513.1	11368.6	11171.8	11079.7	10891.3	10587.7	10215.0
5°	12899.1	12876.1	12792.3	12746.3	12622.7	12417.5	12103.5	11952.8	11653.4	11142.5	10474.6
7.5°	12425.9	12570.4	12685.5	12878.2	13121.0	13112.6	12848.8	12691.8	12356.8	11682.7	10763.5
10°	10598.1	10715.4	10903.8	11341.4	12233.3	13020.5	13330.4	13217.3	12949.3	12178.9	11042.0
12.5°	10240.1	10227.6	10261.1	10388.8	10855.7	11977.9	13248.7	13476.9	13422.5	12633.2	11305.8
15°	10430.7	10416.0	10411.8	10455.8	10568.8	11042.0	12635.3	13290.6	13711.4	13054.0	11529.8
17.5°	10964.5	10901.7	10868.2	10832.6	10799.1	10916.4	11898.3	12769.3	13755.4	13422.5	11716.2
20°	11879.5	11774.8	11651.3	11450.3	11261.8	11203.2	11588.5	12233.3	13598.4	13703.1	11837.6
22.5°	13028.9	12894.9	12681.3	12315.0	11931.8	11709.9	11741.3	12063.7	13363.9	14008.7	11894.1
25°	14320.7	14149.0	13864.3	13355.5	12792.3	12398.7	12193.5	12306.6	13257.1	14366.8	11959.0
27.5°	15704.6	15514.1	15141.4	14448.4	13809.8	13278.0	12859.3	12844.7	13439.3	14835.7	12063.7
30°	17076.0	17046.6	16560.9	15828.1	14982.3	14335.3	13732.4	13654.9	13948.0	15484.8	12271.0
32.5°	18905.8	18686.0	18091.4	17337.7	16362.0	15585.3	14871.3	14691.3	14729.0	16240.6	12591.3
35°	21213.0	20972.3	20134.8	19094.3	18003.5	17086.4	16297.1	16052.2	15960.0	17477.9	13131.5
37.5°	22703.7	22699.5	22174.0	21114.6	19944.3	18933.0	18074.6	17787.8	17601.5	18972.8	13969.0
40°	22743.5	22841.9	22911.0	22900.5	22067.3	21135.6	20373.5	20019.7	19586.3	20970.2	15051.4
42.5°	21522.9	21776.2	22385.5	23419.8	23913.9	23543.3	22900.5	22553.0	21908.1	23107.8	16370.4
45°	19873.1	20049.0	21114.6	23019.9	24914.7	25930.1	25440.2	24818.3	23968.3	25337.6	17553.3
47.5°	19134.0	19165.4	19854.3	21945.8	24990.0	27885.6	28182.9	27171.6	25840.1	27133.9	18478.7
50°	16925.2	16981.7	17932.3	20084.6	24106.5	28808.9	30938.1	29979.2	27881.4	28517.9	18815.8
52.5°	12756.7	12836.3	14042.2	17025.7	21677.8	28415.3	32910.4	32678.0	30117.4	29194.1	18834.6
55°	7526.7	7631.4	8782.9	11460.7	17050.8	25911.2	33056.9	33911.1	31882.4	29594.0	18805.3
57.5°	3515.3	3588.5	4248.1	5904.1	10604.4	20478.2	30850.2	33065.3	32855.9	29805.5	19012.6
60°	1867.6	1888.5	2047.6	2556.4	4792.4	12984.9	26543.5	29857.8	31968.2	30098.6	19265.9
62.5°	1427.9	1434.2	1425.8	1486.5	2014.1	5763.9	20063.6	24546.2	28394.3	29878.7	18985.4
65°	1237.4	1247.8	1189.2	1174.5	1291.8	2056.0	11919.3	17496.8	22312.2	26912.0	17073.9
67.5°	1109.6	1113.8	1042.6	981.9	1002.9	1111.7	4702.4	9578.5	14768.7	19726.5	12375.7
70°	1021.7	1017.5	940.1	843.7	816.5	760.0	1494.9	3511.1	7057.8	10003.5	5755.5
72.5°	904.5	906.6	868.9	743.3	678.3	531.8	693.0	1023.8	2106.2	2726.0	1348.3
75°	801.9	791.4	745.3	665.8	559.0	349.6	343.4	456.4	649.0	644.8	291.0
77.5°	579.9	569.5	584.1	546.4	429.2	226.1	171.7	219.8	263.8	255.4	81.7
80°	425.0	418.7	376.9	454.3	379.0	154.9	106.8	117.2	136.1	115.2	25.1
82.5°	291.0	288.9	265.9	251.2	215.6	94.2	67.0	73.3	87.9	64.9	12.6
85°	46.1	52.3	192.6	152.8	127.7	41.9	46.1	50.2	58.6	35.6	4.2
87.5°	0.0	0.0	90.0	79.6	25.1	16.7	27.2	29.3	29.3	18.8	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°	9986.8	9986.8	9986.8	9986.8	9986.8	9986.8	9986.8	9986.8	9986.8	9986.8	9986.8
2.5°	10024.5	9815.1	9427.8	9027.9	8657.3	8215.6	7912.0	7683.8	7420.0	7348.8	7503.7
5°	10093.6	9697.9	8864.6	7958.0	7105.9	6161.7	5439.3	4867.8	4350.6	4174.8	4333.9
7.5°	10202.4	9614.1	8255.3	6762.5	5280.2	3806.3	2797.1	2133.4	1710.5	1584.9	1651.9
10°	10311.3	9492.7	7549.8	5347.2	3320.6	1852.9	1206.0	963.1	873.1	854.2	864.7
12.5°	10401.3	9329.4	6689.3	3802.1	1775.4	992.4	789.3	749.5	737.0	737.0	741.2
15°	10455.8	9082.3	5669.7	2418.2	1021.7	749.5	688.8	676.3	676.3	678.3	682.5
17.5°	10449.5	8768.3	4553.7	1463.5	764.2	663.7	628.1	617.6	615.5	619.7	621.8
20°	10372.0	8357.9	3433.6	965.2	665.8	605.1	569.5	550.6	548.5	552.7	556.9
22.5°	10225.5	7851.3	2455.9	743.3	600.9	548.5	504.6	487.8	487.8	492.0	496.2
25°	10047.5	7231.5	1679.1	630.2	542.3	487.8	446.0	431.3	435.5	446.0	448.0
27.5°	9825.6	6534.3	1141.0	540.2	471.1	427.1	395.7	385.2	395.7	410.4	414.5
30°	9635.1	5807.8	814.4	466.9	399.9	368.5	349.6	349.6	364.3	391.5	397.8
32.5°	9488.5	5104.4	628.1	412.5	347.5	320.3	309.9	320.3	343.4	370.6	376.9
35°	9469.7	4524.4	531.8	368.5	309.9	282.6	278.5	297.3	320.3	341.3	345.5
37.5°	9614.1	3988.4	479.4	332.9	276.4	251.2	247.1	270.1	293.1	318.2	324.5
40°	9888.4	3567.6	441.8	299.4	249.1	221.9	213.6	230.3	261.7	295.2	303.6
42.5°	10244.3	3220.1	399.9	265.9	221.9	184.2	173.8	192.6	226.1	261.7	272.2
45°	10583.5	2920.7	353.8	228.2	186.3	142.4	138.2	163.3	180.1	215.6	224.0
47.5°	10769.8	2656.9	314.1	186.3	144.5	115.2	115.2	121.4	138.2	180.1	188.4
50°	10707.0	2445.4	272.2	138.2	100.5	87.9	87.9	85.8	111.0	144.5	150.7
52.5°	10581.4	2324.0	234.5	106.8	69.1	62.8	56.5	62.8	77.5	92.1	94.2
55°	10562.6	2303.0	196.8	85.8	48.2	41.9	31.4	31.4	31.4	29.3	25.1
57.5°	10709.1	2336.5	165.4	69.1	35.6	27.2	16.7	0.0	0.0	0.0	0.0
60°	10859.9	2372.1	142.4	48.2	25.1	14.7	2.1	0.0	0.0	0.0	0.0
62.5°	10608.6	2292.6	119.3	29.3	18.8	6.3	0.0	0.0	0.0	0.0	0.0
65°	9318.9	1951.3	94.2	20.9	12.6	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	6628.6	1306.4	62.8	12.6	2.1	0.0	0.0	0.0	0.0	0.0	0.0
70°	3025.4	546.4	39.8	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	646.9	169.6	27.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	131.9	123.5	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	41.9	194.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	25.1	140.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	4.2	20.9	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)