

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: P300774

Luminaire Tested: **GLNA-AF-10-LED-E1-AFL-7027-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300774
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-7027-600-HSS
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 2700K 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: 25078.5 lumens
Efficiency: N/A
Efficacy: 77.6 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

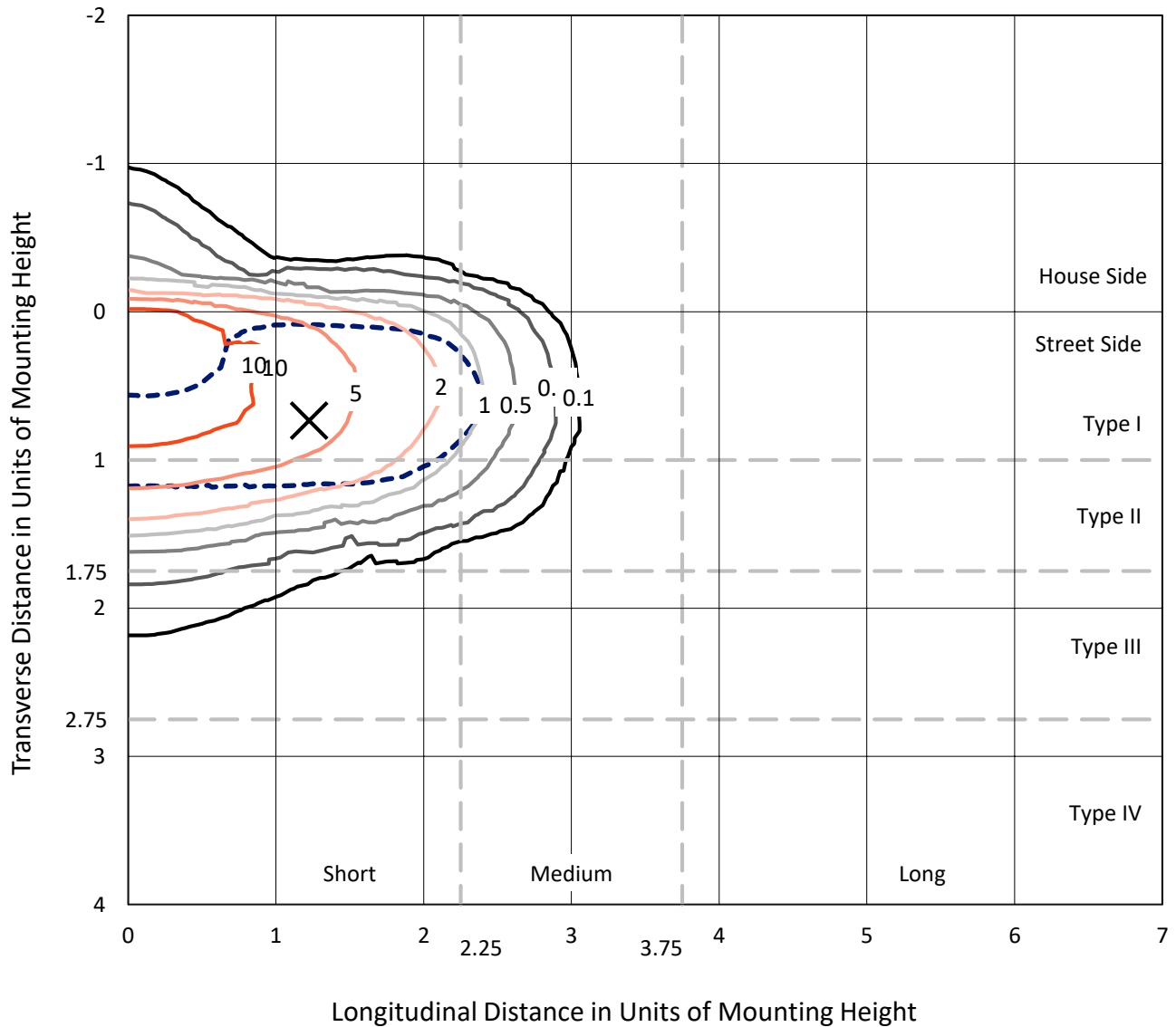


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

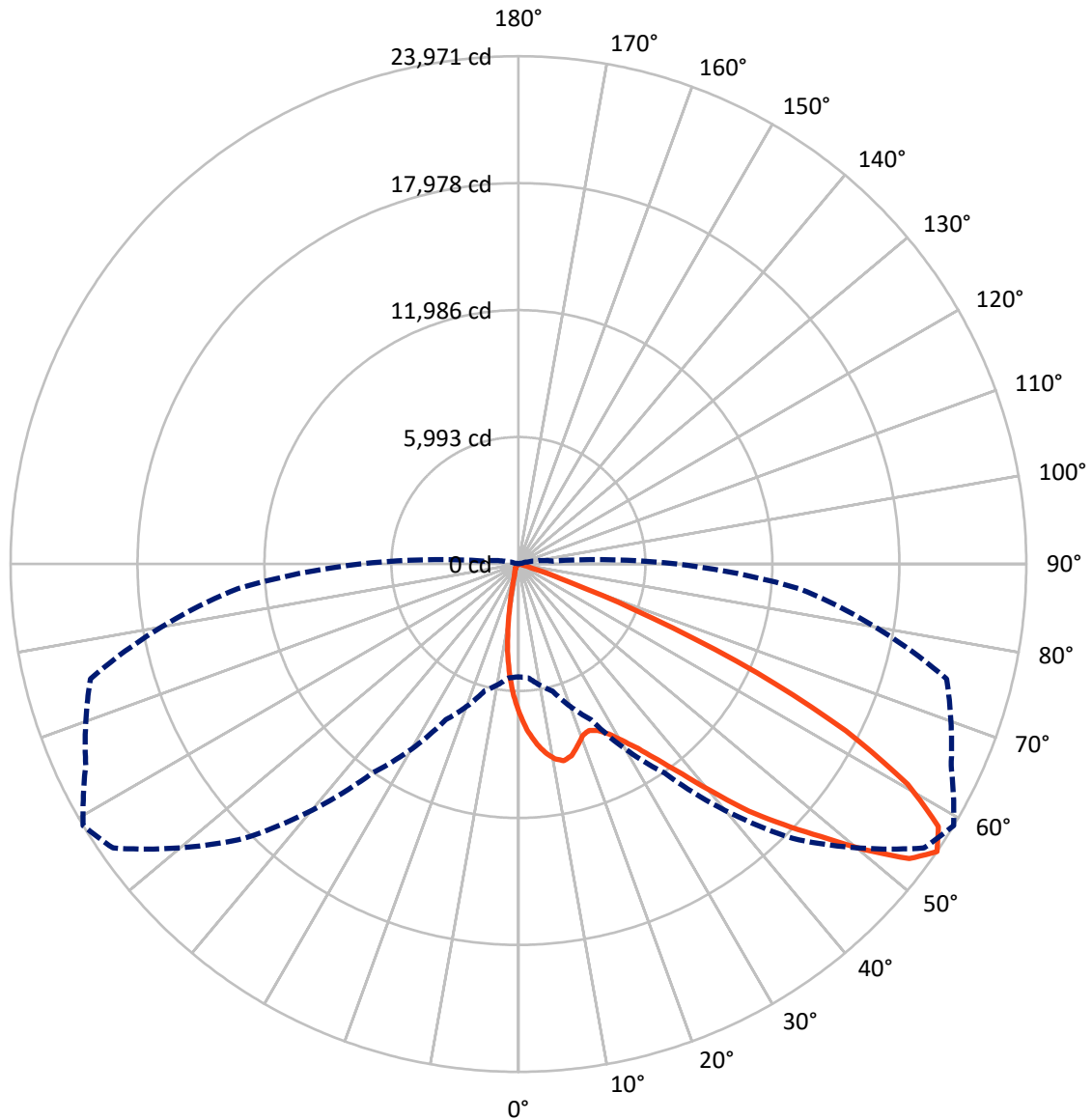


Based on 25 foot mounting height. Maximum calculated value = 14.1 fc
 Type II - Short - Full Cutoff

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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	1400.8	0.0	1400.8
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	23677.8	0.0	23677.8
	% Fixture	94.4	0.0	94.4
Total	Lumens	25078.5	0.0	25078.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	591.3	2.4
10°-20°	1415.8	5.6
20°-30°	2409.1	9.6
30°-40°	4143.1	16.5
40°-50°	6396.5	25.5
50°-60°	6430.5	25.6
60°-70°	3297.6	13.1
70°-80°	357.4	1.4
80°-90°	37.4	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°	25078.5	100.0
0°-180°	25078.5	100.0

Coefficient of Utilization



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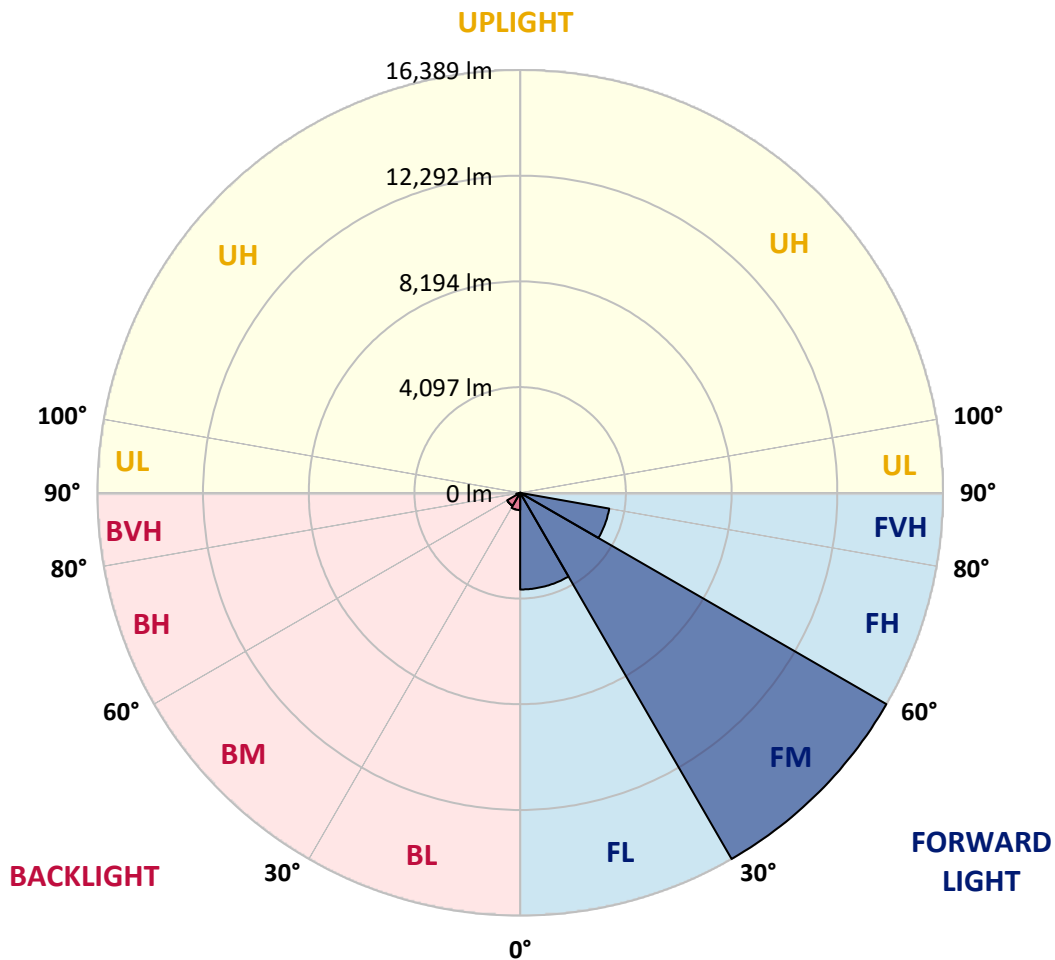
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3747.6	14.9			
FM	(30°-60°)	16388.7	65.3			
FH	(60°-80°)	3504.9	14.0			G2/5000
FVH	(80°-90°)	36.6	0.1			G1/100
BL	(0°-30°)	668.6	2.7	B2/1000		
BM	(30°-60°)	581.3	2.3	B1/1000		
BH	(60°-80°)	150.1	0.6	B1/500		G1/500
BVH	(80°-90°)	0.8	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°	7059.5	7059.5	7059.5	7059.5	7059.5	7059.5	7059.5	7059.5	7059.5	7059.5	7059.5
2.5°	8353.0	8264.2	8237.6	8219.8	8138.4	8036.3	7897.2	7832.1	7698.9	7484.3	7220.8
5°	9118.2	9101.9	9042.7	9010.1	8922.8	8777.8	8555.8	8449.2	8237.6	7876.5	7404.4
7.5°	8783.7	8885.8	8967.2	9103.4	9275.1	9269.1	9082.7	8971.7	8734.9	8258.3	7608.6
10°	7491.7	7574.6	7707.7	8017.1	8647.5	9204.0	9423.0	9343.1	9153.7	8609.1	7805.4
12.5°	7238.6	7229.7	7253.4	7343.7	7673.7	8467.0	9365.3	9526.6	9488.2	8930.2	7991.9
15°	7373.3	7362.9	7360.0	7391.0	7471.0	7805.4	8931.7	9394.9	9692.4	9227.7	8150.3
17.5°	7750.7	7706.3	7682.6	7657.4	7633.8	7716.6	8410.7	9026.4	9723.5	9488.2	8282.0
20°	8397.4	8323.4	8236.1	8094.0	7960.8	7919.4	8191.7	8647.5	9612.5	9686.5	8367.8
22.5°	9209.9	9115.2	8964.3	8705.3	8434.4	8277.5	8299.7	8527.7	9446.7	9902.6	8407.8
25°	10123.1	10001.7	9800.4	9440.8	9042.7	8764.5	8619.4	8699.3	9371.2	10155.6	8453.7
27.5°	11101.3	10966.7	10703.2	10213.4	9762.0	9386.0	9090.1	9079.7	9500.0	10487.2	8527.7
30°	12070.7	12050.0	11706.7	11188.7	10590.8	10133.4	9707.2	9652.4	9859.6	10946.0	8674.2
32.5°	13364.2	13208.8	12788.5	12255.7	11566.1	11017.0	10512.3	10385.0	10411.7	11480.2	8900.6
35°	14995.2	14825.0	14233.0	13497.4	12726.4	12078.1	11520.2	11347.0	11281.9	12354.9	9282.5
37.5°	16048.9	16046.0	15674.5	14925.6	14098.3	13383.5	12776.7	12573.9	12442.2	13411.6	9874.4
40°	16077.1	16146.6	16195.4	16188.0	15599.0	14940.4	14401.7	14151.6	13845.2	14823.5	10639.6
42.5°	15214.2	15393.3	15824.0	16555.1	16904.4	16642.4	16188.0	15942.4	15486.5	16334.6	11572.0
45°	14048.0	14172.3	14925.6	16272.4	17611.8	18329.6	17983.3	17543.7	16942.8	17910.7	12408.2
47.5°	13525.6	13547.8	14034.7	15513.2	17665.1	19711.9	19922.0	19207.2	18265.9	19180.6	13062.3
50°	11964.2	12004.1	12676.1	14197.5	17040.5	20364.6	21869.7	21191.9	19708.9	20158.8	13300.6
52.5°	9017.5	9073.8	9926.2	12035.2	15323.7	20086.3	23263.8	23099.6	21289.5	20636.9	13313.9
55°	5320.5	5394.5	6208.5	8101.4	12053.0	18316.3	23367.4	23971.3	22537.2	20919.6	13293.2
57.5°	2484.9	2536.7	3002.9	4173.6	7496.1	14475.7	21807.5	23373.4	23225.4	21069.0	13439.7
60°	1320.1	1334.9	1447.4	1807.1	3387.7	9178.9	18763.2	21106.0	22597.9	21276.2	13618.8
62.5°	1009.3	1013.8	1007.9	1050.8	1423.7	4074.4	14182.7	17351.3	20071.5	21120.8	13420.5
65°	874.7	882.1	840.6	830.3	913.1	1453.3	8425.5	12368.2	15772.2	19023.7	12069.3
67.5°	784.4	787.4	737.0	694.1	708.9	785.9	3324.0	6770.9	10439.8	13944.4	8748.2
70°	722.2	719.3	664.5	596.4	577.2	537.2	1056.7	2481.9	4989.0	7071.4	4068.5
72.5°	639.4	640.8	614.2	525.4	479.5	375.9	489.9	723.7	1488.9	1926.9	953.1
75°	566.8	559.4	526.9	470.6	395.2	247.2	242.7	322.6	458.8	455.8	205.7
77.5°	410.0	402.6	412.9	386.3	303.4	159.8	121.4	155.4	186.5	180.6	57.7
80°	300.4	296.0	266.4	321.2	267.9	109.5	75.5	82.9	96.2	81.4	17.8
82.5°	205.7	204.2	188.0	177.6	152.4	66.6	47.4	51.8	62.2	45.9	8.9
85°	32.6	37.0	136.2	108.0	90.3	29.6	32.6	35.5	41.4	25.2	3.0
87.5°	0.0	0.0	63.6	56.2	17.8	11.8	19.2	20.7	20.7	13.3	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°	7059.5	7059.5	7059.5	7059.5	7059.5	7059.5	7059.5	7059.5	7059.5	7059.5	7059.5
2.5°	7086.2	6938.2	6664.4	6381.7	6119.7	5807.5	5592.9	5431.5	5245.1	5194.7	5304.3
5°	7135.0	6855.3	6266.2	5625.4	5023.1	4355.6	3845.0	3441.0	3075.4	2951.1	3063.6
7.5°	7212.0	6796.1	5835.6	4780.3	3732.5	2690.6	1977.3	1508.1	1209.1	1120.3	1167.7
10°	7288.9	6710.2	5336.8	3779.9	2347.3	1309.8	852.5	680.8	617.2	603.8	611.2
12.5°	7352.6	6594.8	4728.5	2687.6	1255.0	701.5	558.0	529.8	521.0	521.0	523.9
15°	7391.0	6420.2	4007.8	1709.4	722.2	529.8	486.9	478.0	478.0	479.5	482.5
17.5°	7386.6	6198.2	3219.0	1034.5	540.2	469.2	444.0	436.6	435.1	438.1	439.6
20°	7331.8	5908.1	2427.2	682.3	470.6	427.7	402.6	389.2	387.8	390.7	393.7
22.5°	7228.2	5549.9	1736.0	525.4	424.8	387.8	356.7	344.8	344.8	347.8	350.8
25°	7102.4	5111.9	1186.9	445.5	383.3	344.8	315.2	304.9	307.8	315.2	316.7
27.5°	6945.6	4619.0	806.6	381.8	333.0	301.9	279.7	272.3	279.7	290.1	293.0
30°	6810.9	4105.5	575.7	330.0	282.7	260.5	247.2	247.2	257.5	276.8	281.2
32.5°	6707.3	3608.2	444.0	291.6	245.7	226.4	219.0	226.4	242.7	262.0	266.4
35°	6694.0	3198.2	375.9	260.5	219.0	199.8	196.8	210.2	226.4	241.2	244.2
37.5°	6796.1	2819.4	338.9	235.3	195.4	177.6	174.6	190.9	207.2	225.0	229.4
40°	6990.0	2521.9	312.3	211.6	176.1	156.9	151.0	162.8	185.0	208.7	214.6
42.5°	7241.6	2276.2	282.7	188.0	156.9	130.2	122.8	136.2	159.8	185.0	192.4
45°	7481.3	2064.6	250.1	161.3	131.7	100.6	97.7	115.4	127.3	152.4	158.4
47.5°	7613.0	1878.1	222.0	131.7	102.1	81.4	81.4	85.8	97.7	127.3	133.2
50°	7568.6	1728.6	192.4	97.7	71.0	62.2	62.2	60.7	78.4	102.1	106.6
52.5°	7479.8	1642.8	165.8	75.5	48.8	44.4	40.0	44.4	54.8	65.1	66.6
55°	7466.5	1628.0	139.1	60.7	34.0	29.6	22.2	22.2	22.2	20.7	17.8
57.5°	7570.1	1651.7	116.9	48.8	25.2	19.2	11.8	0.0	0.0	0.0	0.0
60°	7676.7	1676.8	100.6	34.0	17.8	10.4	1.5	0.0	0.0	0.0	0.0
62.5°	7499.1	1620.6	84.4	20.7	13.3	4.4	0.0	0.0	0.0	0.0	0.0
65°	6587.4	1379.3	66.6	14.8	8.9	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	4685.6	923.5	44.4	8.9	1.5	0.0	0.0	0.0	0.0	0.0	0.0
70°	2138.6	386.3	28.1	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	457.3	119.9	19.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	93.2	87.3	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	29.6	137.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	17.8	99.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	3.0	14.8	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)