

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: P300747

Luminaire Tested: **GLNA-AF-05-LED-E1-AFL-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300747
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-05-LED-E1-AFL-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 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: 14575.2 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 162
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

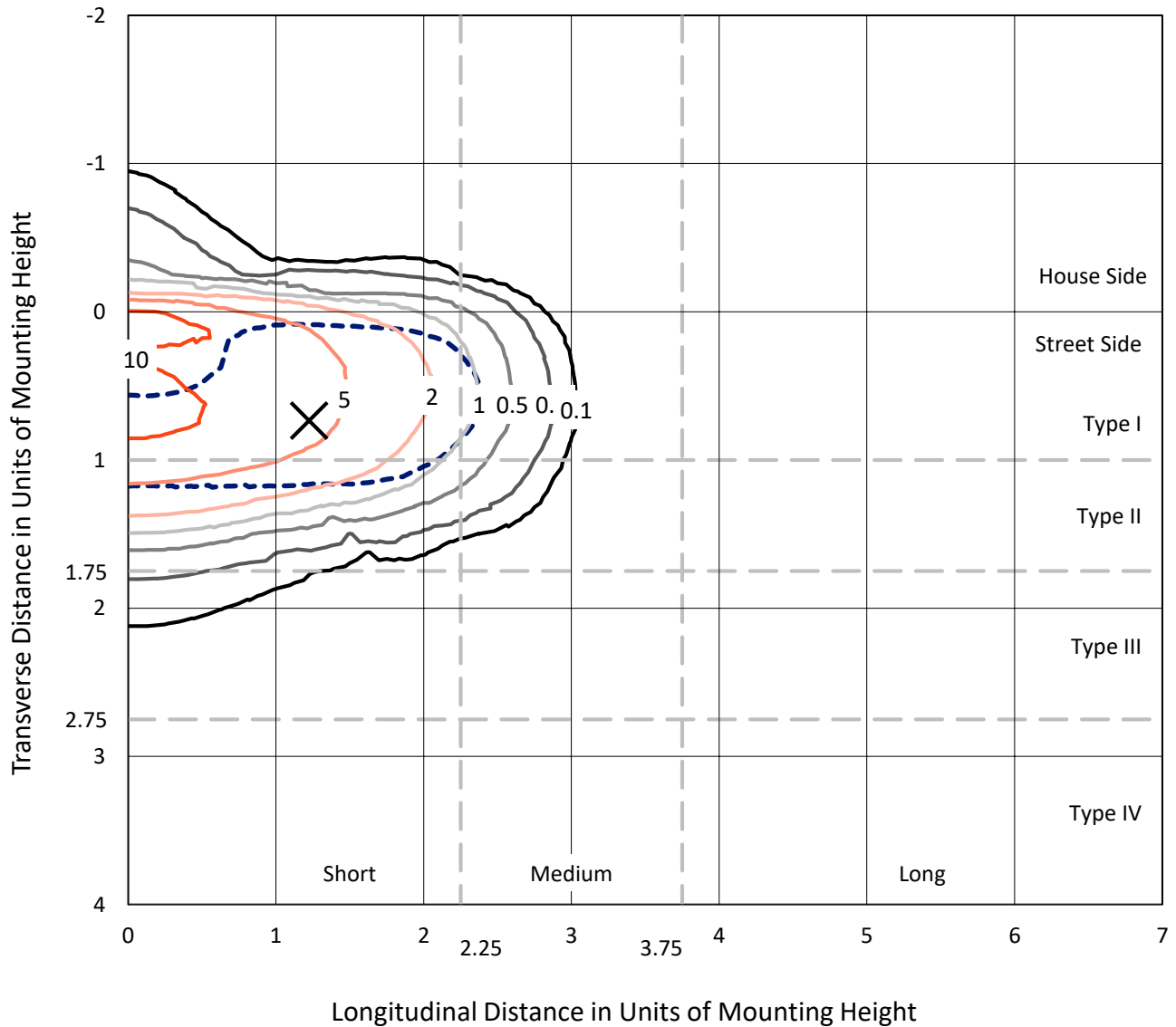


REPORT NUMBER: P300747

CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-600-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

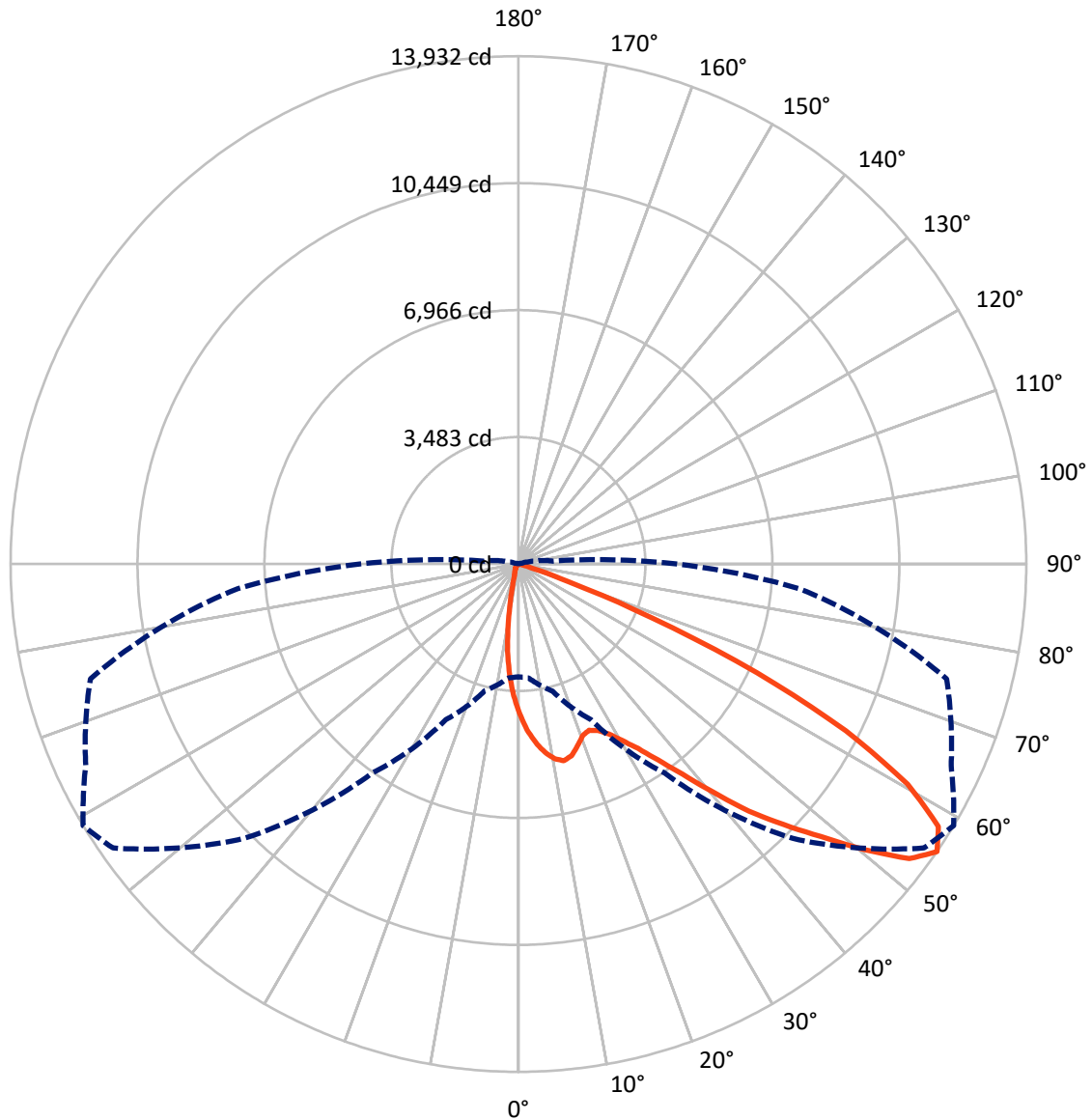


Based on 20 foot mounting height. Maximum calculated value = 12.8 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P300747

CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-600-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P300747

CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-600-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	814.1	0.0	814.1
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	13761.1	0.0	13761.1
	% Fixture	94.4	0.0	94.4
Total	Lumens	14575.2	0.0	14575.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.7	2.4
10°-20°	822.8	5.6
20°-30°	1400.1	9.6
30°-40°	2407.9	16.5
40°-50°	3717.5	25.5
50°-60°	3737.3	25.6
60°-70°	1916.5	13.1
70°-80°	207.7	1.4
80°-90°	21.7	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°	14575.2	100.0
0°-180°	14575.2	100.0

Coefficient of Utilization



REPORT NUMBER: P300747

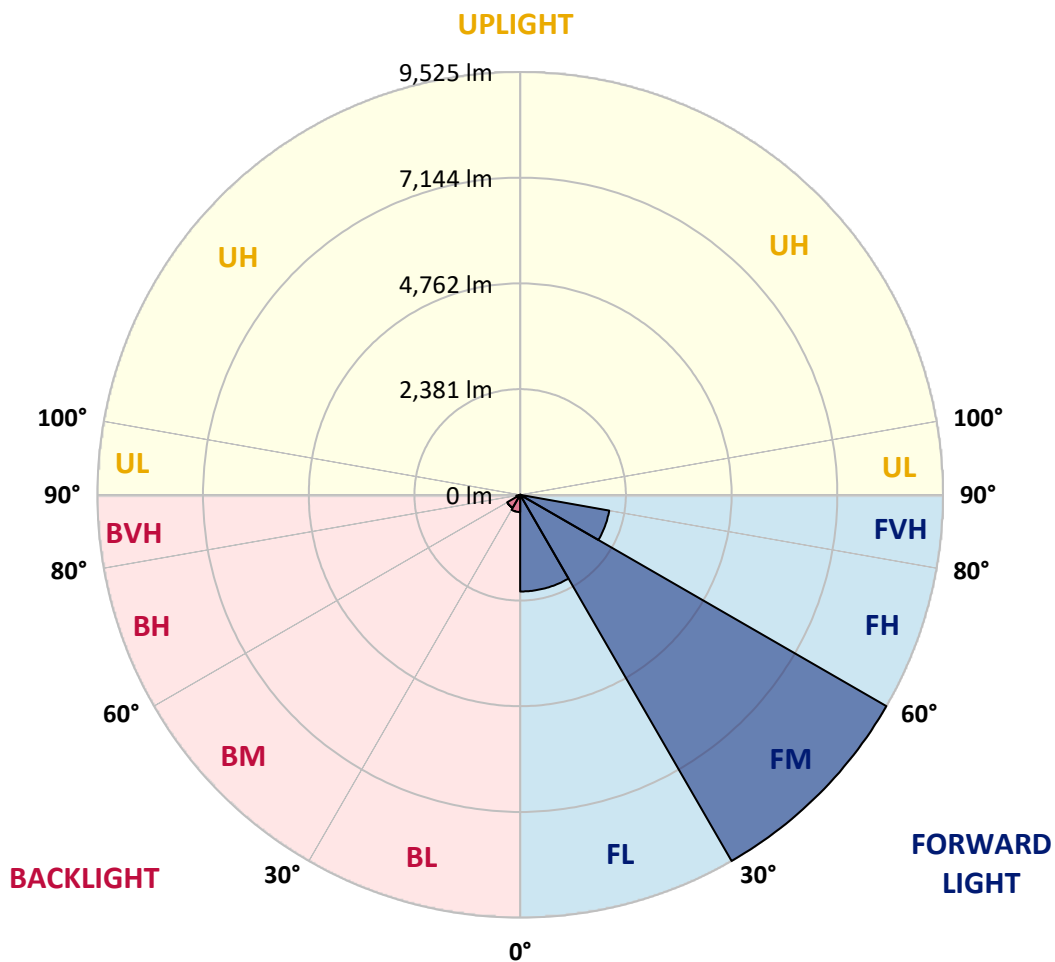
CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-600-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2178.0	14.9			
FM	(30°-60°)	9524.9	65.3			
FH	(60°-80°)	2037.0	14.0			G2/5000
FVH	(80°-90°)	21.3	0.1			G1/100
BL	(0°-30°)	388.6	2.7	B1/500		
BM	(30°-60°)	337.9	2.3	B1/1000		
BH	(60°-80°)	87.2	0.6	B0/110		G0/110
BVH	(80°-90°)	0.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





REPORT NUMBER: P300747

CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-600-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	4102.9	4102.9	4102.9	4102.9	4102.9	4102.9	4102.9	4102.9	4102.9	4102.9	4102.9
2.5°	4854.6	4803.0	4787.6	4777.2	4729.9	4670.6	4589.7	4551.9	4474.5	4349.7	4196.6
5°	5299.3	5289.9	5255.5	5236.5	5185.8	5101.5	4972.5	4910.6	4787.6	4577.7	4303.3
7.5°	5104.9	5164.3	5211.6	5290.7	5390.5	5387.1	5278.7	5214.2	5076.6	4799.6	4422.0
10°	4354.0	4402.2	4479.6	4659.4	5025.8	5349.2	5476.5	5430.1	5320.0	5003.4	4536.4
12.5°	4207.0	4201.8	4215.6	4268.0	4459.8	4920.9	5443.0	5536.7	5514.4	5190.1	4644.8
15°	4285.2	4279.2	4277.5	4295.6	4342.0	4536.4	5191.0	5460.2	5633.1	5363.0	4736.8
17.5°	4504.6	4478.8	4465.0	4450.4	4436.6	4484.8	4888.2	5246.0	5651.1	5514.4	4813.4
20°	4880.4	4837.4	4786.7	4704.1	4626.7	4602.6	4760.9	5025.8	5586.6	5629.6	4863.2
22.5°	5352.7	5297.6	5209.9	5059.4	4902.0	4810.8	4823.7	4956.1	5490.3	5755.2	4886.5
25°	5883.4	5812.8	5695.9	5486.8	5255.5	5093.8	5009.5	5055.9	5446.4	5902.3	4913.1
27.5°	6451.9	6373.7	6220.5	5935.8	5673.5	5455.0	5283.0	5277.0	5521.3	6095.0	4956.1
30°	7015.3	7003.3	6803.7	6502.7	6155.2	5889.4	5641.7	5609.8	5730.3	6361.6	5041.3
32.5°	7767.1	7676.8	7432.5	7122.8	6722.0	6402.9	6109.6	6035.6	6051.1	6672.1	5172.9
35°	8715.0	8616.0	8272.0	7844.5	7396.4	7019.6	6695.3	6594.7	6556.9	7180.5	5394.8
37.5°	9327.4	9325.7	9109.8	8674.5	8193.7	7778.3	7425.6	7307.8	7231.2	7794.6	5738.9
40°	9343.7	9384.2	9412.5	9408.2	9065.9	8683.1	8370.0	8224.7	8046.6	8615.2	6183.6
42.5°	8842.3	8946.3	9196.6	9621.6	9824.5	9672.3	9408.2	9265.5	9000.5	9493.4	6725.5
45°	8164.5	8236.7	8674.5	9457.3	10235.7	10652.9	10451.6	10196.1	9846.9	10409.4	7211.4
47.5°	7860.8	7873.7	8156.7	9016.0	10266.7	11456.2	11578.4	11162.9	10615.9	11147.4	7591.6
50°	6953.4	6976.6	7367.1	8251.3	9903.7	11835.6	12710.3	12316.4	11454.5	11716.0	7730.1
52.5°	5240.8	5273.5	5769.0	6994.7	8905.9	11673.9	13520.6	13425.1	12373.1	11993.8	7737.8
55°	3092.2	3135.2	3608.3	4708.4	7005.0	10645.1	13580.8	13931.7	13098.2	12158.1	7725.8
57.5°	1444.2	1474.3	1745.2	2425.6	4356.6	8413.1	12674.2	13584.2	13498.2	12245.0	7811.0
60°	767.2	775.8	841.2	1050.2	1968.9	5334.6	10904.9	12266.5	13133.5	12365.4	7915.0
62.5°	586.6	589.2	585.8	610.7	827.5	2368.0	8242.7	10084.3	11665.3	12275.1	7799.8
65°	508.3	512.6	488.6	482.5	530.7	844.7	4896.8	7188.2	9166.5	11056.3	7014.5
67.5°	455.9	457.6	428.4	403.4	412.0	456.7	1931.9	3935.2	6067.4	8104.3	5084.3
70°	419.7	418.0	386.2	346.6	335.5	312.2	614.1	1442.5	2899.5	4109.8	2364.5
72.5°	371.6	372.4	357.0	305.4	278.7	218.5	284.7	420.6	865.3	1119.9	553.9
75°	329.4	325.1	306.2	273.5	229.7	143.6	141.1	187.5	266.6	264.9	119.6
77.5°	238.3	234.0	240.0	224.5	176.3	92.9	70.5	90.3	108.4	104.9	33.5
80°	174.6	172.0	154.8	186.7	155.7	63.7	43.9	48.2	55.9	47.3	10.3
82.5°	119.6	118.7	109.2	103.2	88.6	38.7	27.5	30.1	36.1	26.7	5.2
85°	18.9	21.5	79.1	62.8	52.5	17.2	18.9	20.6	24.1	14.6	1.7
87.5°	0.0	0.0	37.0	32.7	10.3	6.9	11.2	12.0	12.0	7.7	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



REPORT NUMBER: P300747

CATALOG NUMBER: GLNA-AF-05-LED-E1-AFL-600-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4102.9	4102.9	4102.9	4102.9	4102.9	4102.9	4102.9	4102.9	4102.9	4102.9	4102.9
2.5°	4118.4	4032.3	3873.2	3708.9	3556.7	3375.2	3250.5	3156.7	3048.3	3019.1	3082.8
5°	4146.7	3984.2	3641.8	3269.4	2919.3	2531.4	2234.6	1999.8	1787.4	1715.1	1780.5
7.5°	4191.5	3949.8	3391.5	2778.3	2169.3	1563.7	1149.2	876.5	702.7	651.1	678.7
10°	4236.2	3899.9	3101.7	2196.8	1364.2	761.2	495.4	395.7	358.7	350.9	355.2
12.5°	4273.2	3832.8	2748.2	1562.0	729.4	407.7	324.3	307.9	302.8	302.8	304.5
15°	4295.6	3731.3	2329.3	993.5	419.7	307.9	283.0	277.8	277.8	278.7	280.4
17.5°	4293.0	3602.3	1870.8	601.2	314.0	272.7	258.0	253.7	252.9	254.6	255.5
20°	4261.1	3433.7	1410.6	396.5	273.5	248.6	234.0	226.2	225.4	227.1	228.8
22.5°	4200.9	3225.5	1008.9	305.4	246.9	225.4	207.3	200.4	200.4	202.1	203.9
25°	4127.8	2970.9	689.8	258.9	222.8	200.4	183.2	177.2	178.9	183.2	184.1
27.5°	4036.6	2684.5	468.8	221.9	193.5	175.5	162.6	158.3	162.6	168.6	170.3
30°	3958.4	2386.0	334.6	191.8	164.3	151.4	143.6	143.6	149.7	160.8	163.4
32.5°	3898.2	2097.0	258.0	169.4	142.8	131.6	127.3	131.6	141.1	152.2	154.8
35°	3890.4	1858.8	218.5	151.4	127.3	116.1	114.4	122.1	131.6	140.2	141.9
37.5°	3949.8	1638.6	197.0	136.8	113.5	103.2	101.5	111.0	120.4	130.7	133.3
40°	4062.5	1465.7	181.5	123.0	102.4	91.2	87.7	94.6	107.5	121.3	124.7
42.5°	4208.7	1322.9	164.3	109.2	91.2	75.7	71.4	79.1	92.9	107.5	111.8
45°	4348.0	1199.9	145.4	93.8	76.6	58.5	56.8	67.1	74.0	88.6	92.0
47.5°	4424.6	1091.5	129.0	76.6	59.3	47.3	47.3	49.9	56.8	74.0	77.4
50°	4398.8	1004.6	111.8	56.8	41.3	36.1	36.1	35.3	45.6	59.3	61.9
52.5°	4347.2	954.8	96.3	43.9	28.4	25.8	23.2	25.8	31.8	37.8	38.7
55°	4339.4	946.2	80.9	35.3	19.8	17.2	12.9	12.9	12.9	12.0	10.3
57.5°	4399.6	959.9	68.0	28.4	14.6	11.2	6.9	0.0	0.0	0.0	0.0
60°	4461.6	974.5	58.5	19.8	10.3	6.0	0.9	0.0	0.0	0.0	0.0
62.5°	4358.3	941.9	49.0	12.0	7.7	2.6	0.0	0.0	0.0	0.0	0.0
65°	3828.5	801.7	38.7	8.6	5.2	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	2723.2	536.7	25.8	5.2	0.9	0.0	0.0	0.0	0.0	0.0	0.0
70°	1242.9	224.5	16.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	265.8	69.7	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	54.2	50.7	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	17.2	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	10.3	57.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.7	8.6	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)