

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: P300954

Luminaire Tested: **GLNA-AF-10-LED-E1-SL4-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300954
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
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-SL4-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39158.6 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G5

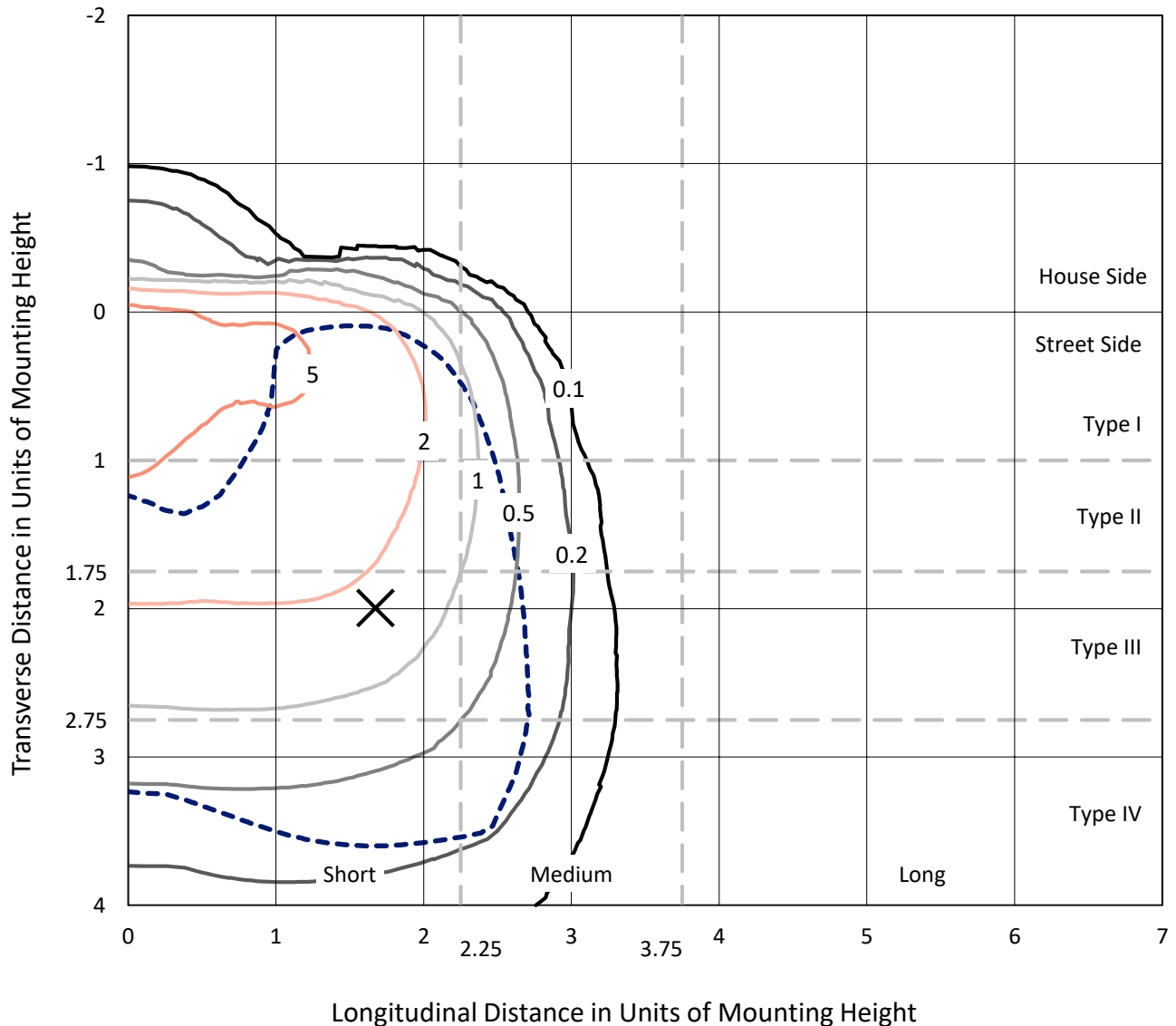
Input Watts (W): 419
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

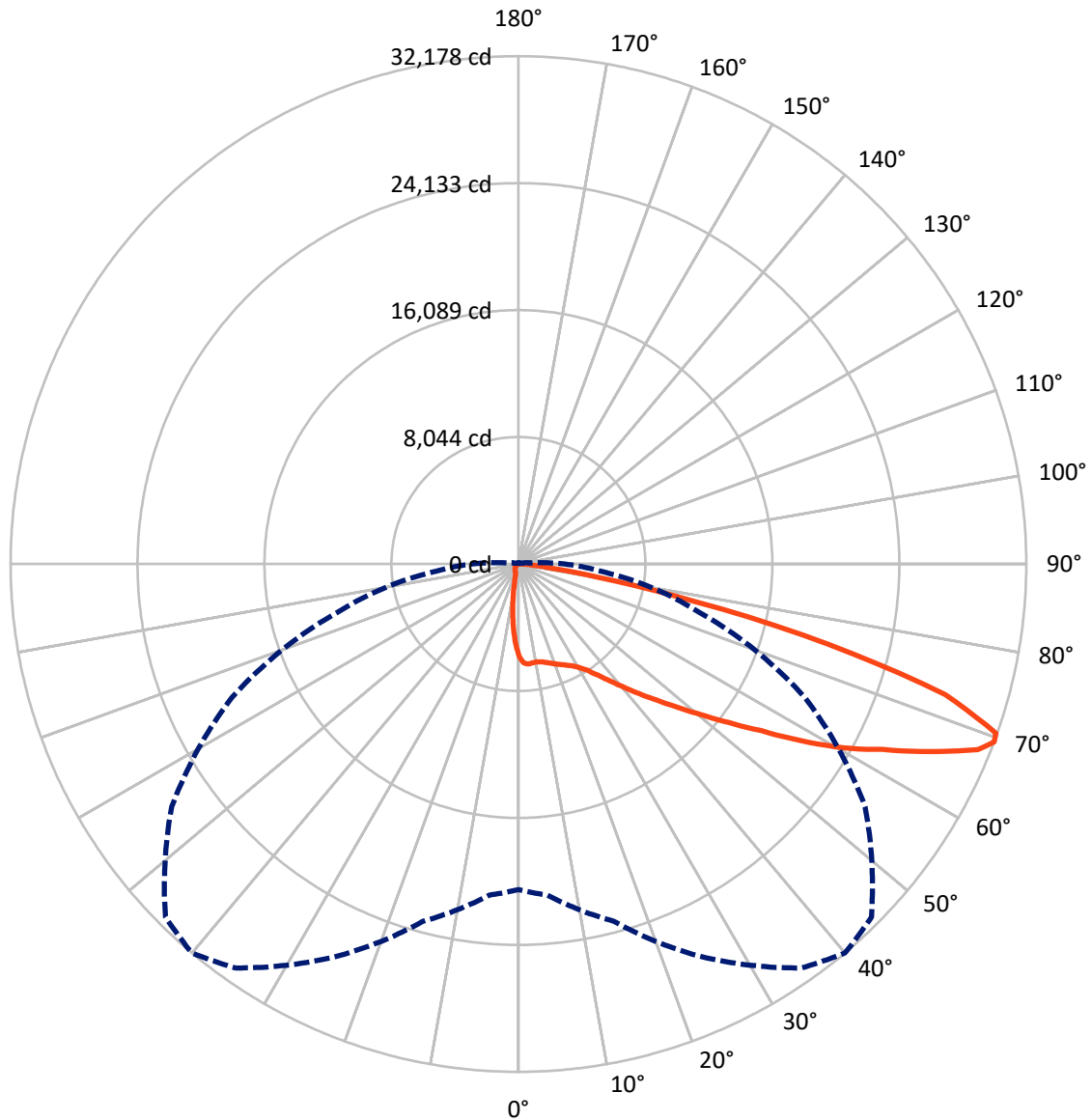
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.1 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2291.0	0.0	2291.0
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	36867.6	0.0	36867.6
	% Fixture	94.1	0.0	94.1
Total	Lumens	39158.6	0.0	39158.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	474.4	1.2
10°-20°	1166.5	3.0
20°-30°	1964.9	5.0
30°-40°	3216.5	8.2
40°-50°	5569.3	14.2
50°-60°	8772.2	22.4
60°-70°	11456.2	29.3
70°-80°	5900.4	15.1
80°-90°	638.3	1.6
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°	39158.6	100.0
0°-180°	39158.6	100.0



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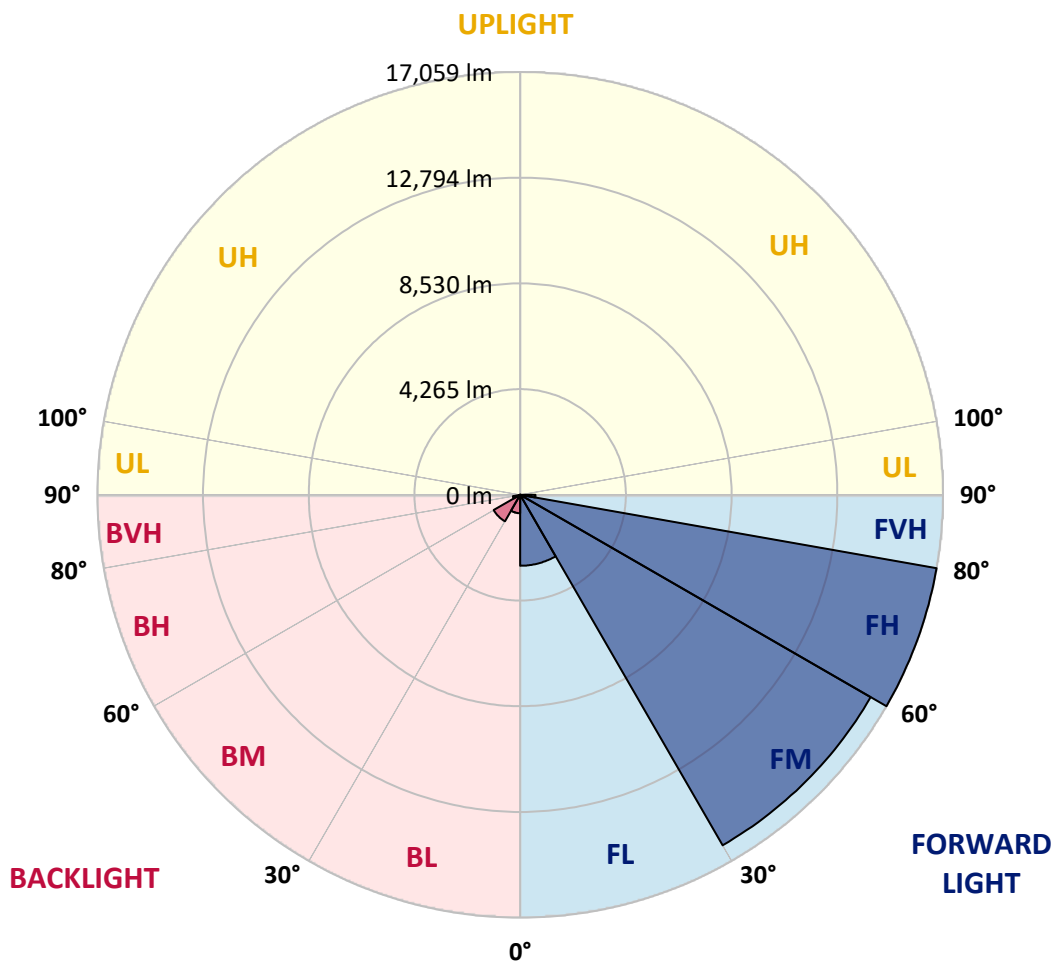
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2863.6	7.3			
FM	(30°-60°)	16326.7	41.7			
FH	(60°-80°)	17059.1	43.6			G5
FVH	(80°-90°)	618.2	1.6			G4/750
BL	(0°-30°)	742.1	1.9	B2/1000		
BM	(30°-60°)	1231.4	3.1	B2/2500		
BH	(60°-80°)	297.5	0.8	B1/500		G1/500
BVH	(80°-90°)	20.0	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	5850.5	5850.5	5850.5	5850.5	5850.5	5850.5	5850.5	5850.5	5850.5	5850.5	5850.5
2.5°	6423.9	6388.9	6368.0	6340.0	6305.0	6274.7	6263.1	6176.8	6095.2	5983.4	5855.2
5°	6542.8	6531.1	6493.8	6456.5	6414.6	6368.0	6342.3	6239.8	6123.2	5960.1	5736.3
7.5°	6554.4	6540.4	6493.8	6442.5	6384.3	6328.3	6284.0	6181.5	6074.3	5908.8	5636.1
10°	6535.8	6519.5	6484.5	6428.6	6356.3	6302.7	6258.4	6160.5	6069.6	5920.4	5617.4
12.5°	6514.8	6498.5	6482.2	6454.2	6391.3	6354.0	6316.7	6223.4	6141.9	6016.0	5685.0
15°	6535.8	6526.5	6545.1	6533.4	6498.5	6465.9	6428.6	6344.6	6270.1	6165.2	5808.5
17.5°	6624.4	6624.4	6682.6	6689.6	6657.0	6610.4	6556.8	6472.8	6409.9	6321.3	5955.4
20°	6831.8	6824.8	6899.4	6913.4	6834.1	6761.9	6682.6	6580.1	6531.1	6475.2	6099.9
22.5°	7188.4	7155.8	7200.1	7186.1	7029.9	6918.0	6820.1	6694.3	6668.6	6643.0	6260.7
25°	7652.3	7633.6	7663.9	7526.4	7251.4	7099.8	6983.3	6841.1	6841.1	6866.8	6442.5
27.5°	8325.9	8256.0	8153.4	7911.0	7498.4	7305.0	7179.1	7027.6	7067.2	7162.8	6682.6
30°	9015.8	8938.9	8703.5	8330.6	7799.1	7596.3	7449.5	7291.0	7384.2	7559.0	7004.3
32.5°	9696.4	9610.2	9276.9	8806.1	8230.3	8027.5	7885.4	7710.5	7866.7	8160.4	7475.1
35°	10356.1	10279.2	9894.6	9339.8	8803.7	8635.9	8505.4	8353.9	8554.3	8964.6	8139.4
37.5°	11097.3	11013.4	10544.9	9943.5	9500.7	9379.4	9283.9	9132.4	9482.0	10083.4	9064.8
40°	12008.7	11866.5	11234.8	10635.8	10307.1	10248.9	10183.6	10162.6	10705.7	11537.8	10297.8
42.5°	13052.9	12819.8	11957.4	11365.4	11192.9	11234.8	11218.5	11311.7	12237.1	13346.6	11798.9
45°	14097.1	13796.5	12761.5	12143.9	12167.2	12314.0	12404.9	12777.9	14155.4	15421.1	13414.2
47.5°	14982.9	14686.9	13533.1	12985.3	13265.0	13554.0	13801.1	14507.4	16127.3	17462.9	14670.5
50°	15740.4	15460.7	14351.2	13910.7	14540.0	15006.2	15407.1	16453.7	18248.4	19017.6	15551.6
52.5°	16360.4	16174.0	15199.6	14971.2	15996.8	16679.8	17267.1	18521.1	20127.1	20281.0	16236.9
55°	16964.1	16831.3	16111.0	16232.2	17707.7	18637.7	19381.2	20714.5	21744.7	21334.5	16894.2
57.5°	17658.7	17537.5	17150.6	17831.2	19957.0	21127.1	21938.2	22658.5	23168.9	22411.4	17514.2
60°	18367.3	18297.4	18306.7	19607.3	22539.6	23663.1	24110.6	24297.1	24567.4	23425.3	17549.2
62.5°	19043.3	19176.1	19628.3	21583.9	25012.6	25875.1	26101.2	26285.3	25968.3	23586.1	16213.6
65°	20187.7	20404.5	21483.7	24229.5	27732.8	28655.8	28888.9	28257.2	26189.7	21507.0	13188.1
67.5°	20747.1	21143.4	23068.7	26695.5	30371.3	31396.9	31310.7	28385.4	23502.2	16400.0	8463.4
69°	20630.6	21052.5	23434.6	27450.7	31247.7	32177.7	31630.0	26816.7	20022.2	11880.5	5195.5
70°	20169.1	20595.6	23245.8	27422.8	31359.6	32096.2	31038.0	24879.8	16929.2	8687.2	3249.2
72.5°	16842.9	17211.2	20637.6	24786.5	28888.9	28289.8	25966.0	17236.8	8249.0	2365.8	731.9
75°	10367.7	10572.9	14808.1	18672.7	21819.3	20281.0	17299.8	8575.3	2459.1	669.0	405.6
77.5°	5477.6	5570.8	8106.8	11006.4	13831.4	11444.6	8866.7	3344.8	1132.8	419.6	293.7
80°	3237.6	3307.5	4365.7	5032.4	5985.7	4999.7	3545.3	2053.5	811.1	263.4	261.1
82.5°	1853.0	1897.3	3165.3	2797.1	2358.8	2013.9	1764.5	1946.3	487.2	177.1	270.4
85°	680.6	689.9	1780.8	2128.1	1403.2	834.5	876.4	1613.0	130.5	111.9	212.1
87.5°	317.0	310.0	916.0	1303.0	820.5	529.1	682.9	354.3	51.3	72.3	58.3
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°	5850.5	5850.5	5850.5	5850.5	5850.5	5850.5	5850.5	5850.5	5850.5	5850.5	5850.5
2.5°	5780.6	5694.3	5538.2	5377.3	5214.2	5088.3	4964.8	4866.9	4834.2	4773.6	4778.3
5°	5603.4	5444.9	5118.6	4787.6	4442.7	4158.3	3890.2	3673.5	3568.6	3461.4	3461.4
7.5°	5449.6	5218.8	4708.4	4169.9	3612.9	3144.4	2722.5	2405.5	2230.6	2090.8	2088.5
10°	5391.3	5079.0	4365.7	3594.2	2818.0	2179.4	1678.2	1356.6	1191.1	1083.9	1079.2
12.5°	5417.0	5030.0	4102.3	3062.8	2088.5	1400.9	972.0	764.5	694.6	662.0	662.0
15°	5491.5	5016.0	3839.0	2543.0	1475.4	876.4	645.7	589.7	585.0	585.0	585.0
17.5°	5582.4	5020.7	3568.6	2037.2	1004.6	627.0	557.1	550.1	554.7	554.7	554.7
20°	5675.7	5023.0	3277.2	1568.7	708.6	545.4	524.4	522.1	526.8	526.8	529.1
22.5°	5789.9	5034.7	2985.9	1172.4	585.0	515.1	498.8	498.8	501.1	501.1	498.8
25°	5920.4	5058.0	2682.8	869.4	533.8	494.1	480.2	477.8	480.2	477.8	475.5
27.5°	6083.6	5090.6	2344.9	680.6	510.5	473.2	461.5	461.5	459.2	456.9	454.5
30°	6288.7	5127.9	1964.9	578.1	487.2	454.5	442.9	440.5	438.2	433.5	433.5
32.5°	6601.0	5209.5	1589.7	524.4	461.5	428.9	419.6	419.6	414.9	410.2	407.9
35°	7081.2	5370.3	1254.0	491.8	433.5	400.9	389.3	389.3	384.6	382.3	379.9
37.5°	7745.5	5615.1	974.3	461.5	405.6	370.6	359.0	356.6	352.0	347.3	345.0
40°	8628.9	5918.1	766.9	433.5	377.6	340.3	331.0	326.3	317.0	310.0	310.0
42.5°	9738.4	6263.1	622.3	403.2	345.0	312.3	305.3	298.4	282.0	275.0	272.7
45°	10899.2	6573.1	526.8	368.3	312.3	284.4	279.7	268.1	247.1	240.1	240.1
47.5°	11736.0	6645.3	463.8	335.6	282.0	254.1	251.7	230.8	212.1	207.4	205.1
50°	12258.1	6503.1	412.6	303.0	254.1	226.1	219.1	193.5	181.8	177.1	174.8
52.5°	12610.0	6249.1	370.6	275.0	228.4	200.5	184.1	165.5	156.2	151.5	151.5
55°	12892.1	5890.1	328.7	249.4	207.4	179.5	156.2	142.2	132.9	128.2	128.2
57.5°	12971.3	5403.0	286.7	228.4	186.5	158.5	132.9	123.5	111.9	109.6	109.6
60°	12395.6	4524.2	254.1	202.8	167.8	137.5	116.5	104.9	93.2	90.9	88.6
62.5°	10878.2	3501.0	223.8	179.5	146.8	118.9	100.2	86.2	76.9	76.9	76.9
65°	8297.9	2347.2	195.8	156.2	128.2	100.2	86.2	69.9	65.3	65.3	67.6
67.5°	4967.1	1277.3	167.8	132.9	109.6	83.9	72.3	60.6	58.3	60.6	60.6
69°	2911.3	750.5	151.5	118.9	95.6	74.6	62.9	53.6	58.3	60.6	60.6
70°	1797.1	505.8	139.9	107.2	86.2	67.6	58.3	51.3	55.9	58.3	58.3
72.5°	501.1	261.1	111.9	83.9	69.9	55.9	46.6	46.6	53.6	55.9	55.9
75°	326.3	193.5	86.2	62.9	53.6	44.3	39.6	44.3	51.3	53.6	53.6
77.5°	270.4	158.5	69.9	51.3	44.3	42.0	37.3	39.6	46.6	48.9	48.9
80°	247.1	111.9	55.9	46.6	39.6	37.3	35.0	32.6	42.0	44.3	44.3
82.5°	235.4	88.6	48.9	42.0	37.3	32.6	30.3	32.6	37.3	39.6	42.0
85°	146.8	58.3	44.3	39.6	32.6	30.3	30.3	30.3	35.0	37.3	37.3
87.5°	53.6	46.6	39.6	32.6	28.0	28.0	28.0	28.0	30.3	35.0	35.0
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)