

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: P300942

Luminaire Tested: **GLNA-AF-08-LED-E1-SL4-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300942
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-08-LED-E1-SL4-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 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: 31706.4 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G5

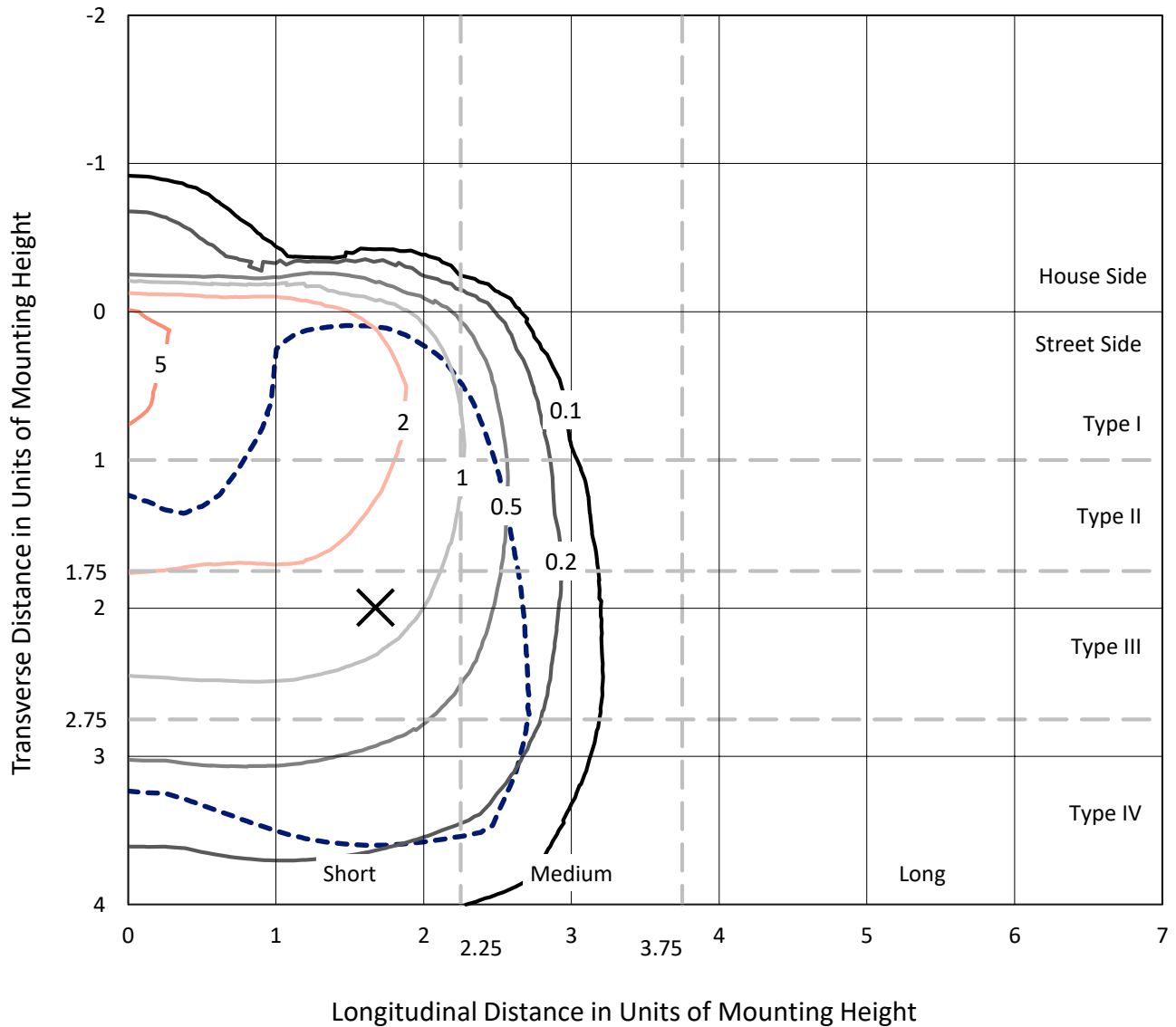
Input Watts (W): 334
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

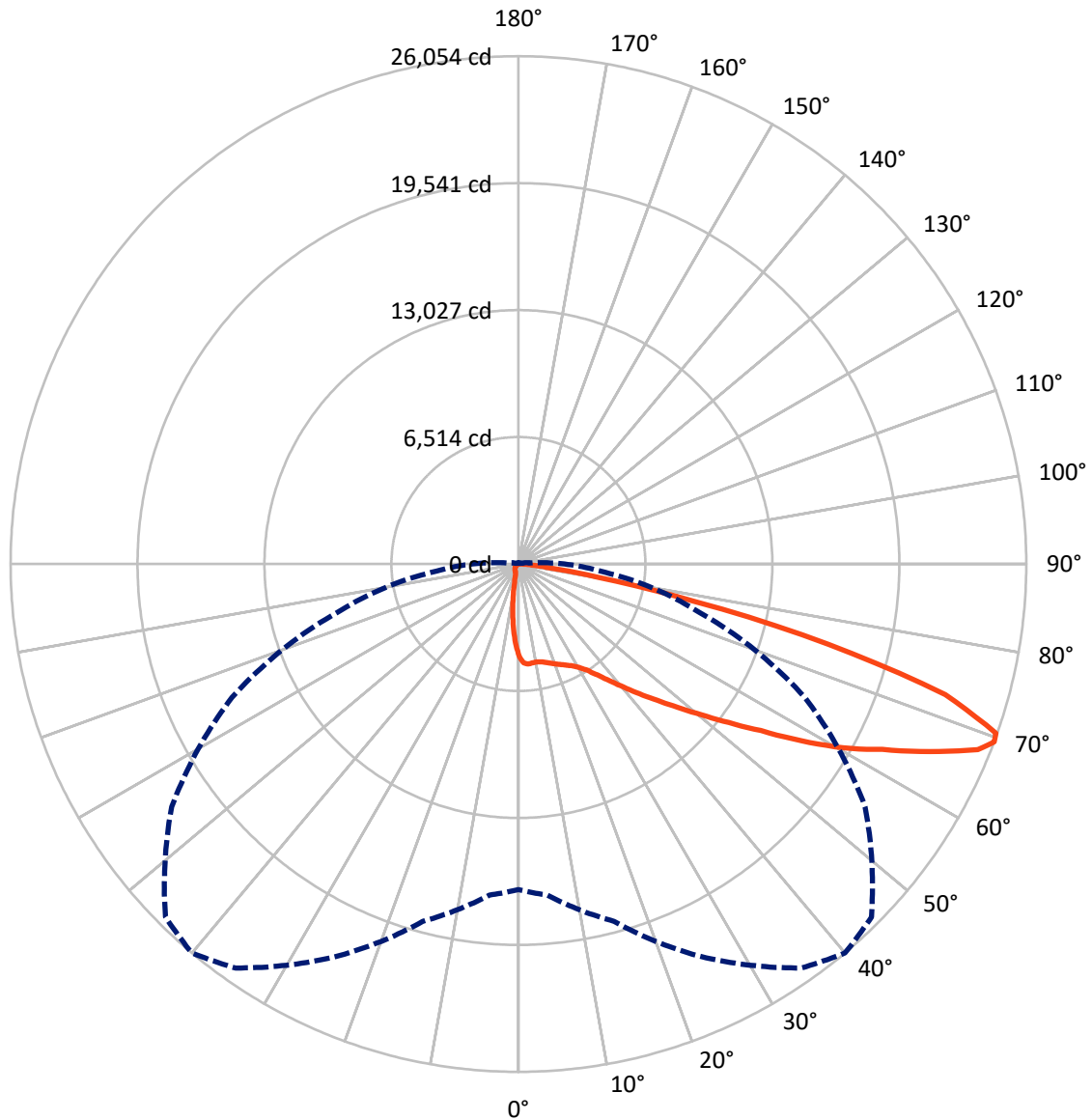
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.8 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	1855.0	0.0	1855.0
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	29851.4	0.0	29851.4
	% Fixture	94.1	0.0	94.1
Total	Lumens	31706.4	0.0	31706.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	384.1	1.2
10°-20°	944.5	3.0
20°-30°	1590.9	5.0
30°-40°	2604.4	8.2
40°-50°	4509.4	14.2
50°-60°	7102.8	22.4
60°-70°	9276.0	29.3
70°-80°	4777.5	15.1
80°-90°	516.8	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°	31706.4	100.0
0°-180°	31706.4	100.0



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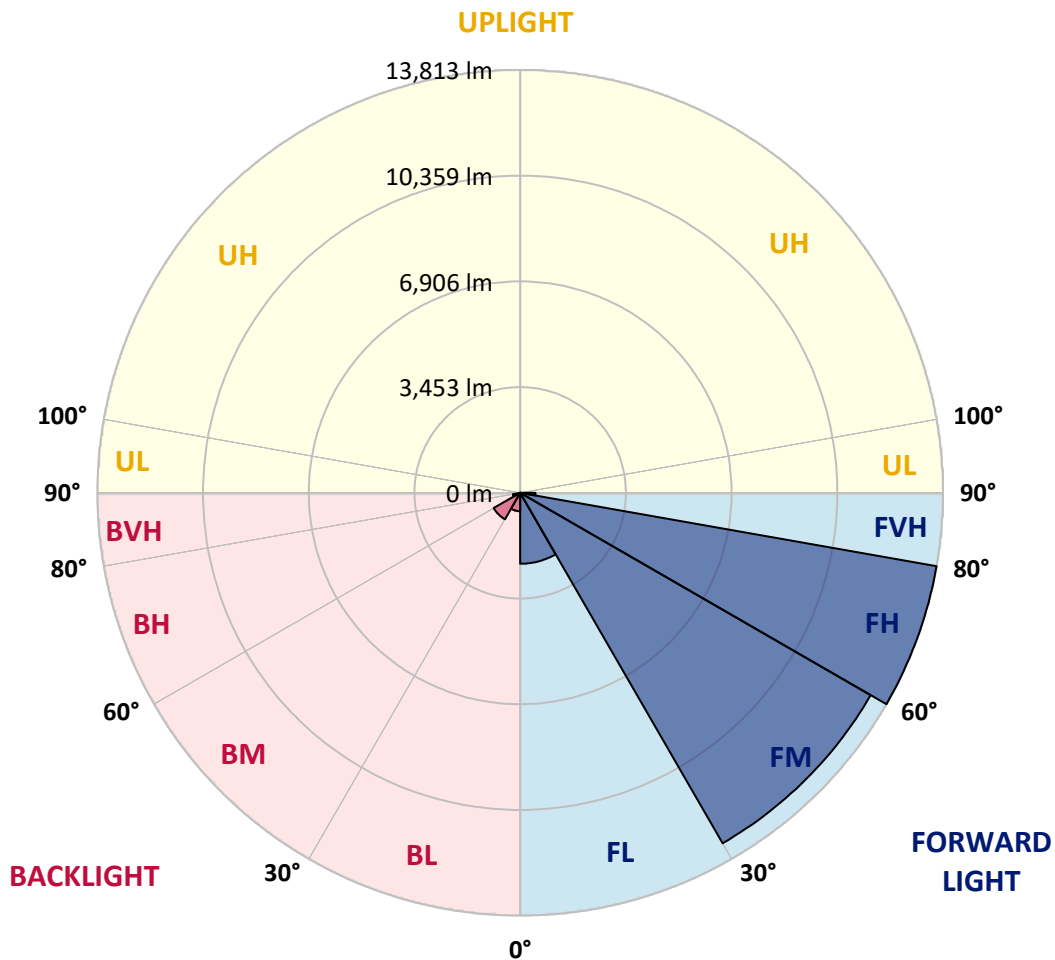
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2318.7	7.3			
FM	(30°-60°)	13219.6	41.7			
FH	(60°-80°)	13812.6	43.6			G5
FVH	(80°-90°)	500.6	1.6			G4/750
BL	(0°-30°)	600.9	1.9	B2/1000		
BM	(30°-60°)	997.0	3.1	B1/1000		
BH	(60°-80°)	240.9	0.8	B1/500		G1/500
BVH	(80°-90°)	16.2	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°	4737.1	4737.1	4737.1	4737.1	4737.1	4737.1	4737.1	4737.1	4737.1	4737.1	4737.1
2.5°	5201.4	5173.1	5156.1	5133.4	5105.1	5080.6	5071.2	5001.3	4935.3	4844.7	4740.9
5°	5297.6	5288.2	5258.0	5227.8	5193.8	5156.1	5135.3	5052.3	4957.9	4825.8	4644.6
7.5°	5307.1	5295.7	5258.0	5216.5	5169.3	5124.0	5088.1	5005.1	4918.3	4784.3	4563.5
10°	5292.0	5278.8	5250.5	5205.2	5146.6	5103.2	5067.4	4988.1	4914.5	4793.7	4548.4
12.5°	5275.0	5261.8	5248.6	5225.9	5175.0	5144.8	5114.6	5039.1	4973.0	4871.1	4603.1
15°	5292.0	5284.4	5299.5	5290.1	5261.8	5235.4	5205.2	5137.2	5076.8	4991.9	4703.1
17.5°	5363.7	5363.7	5410.9	5416.5	5390.1	5352.4	5309.0	5241.0	5190.1	5118.3	4822.0
20°	5531.7	5526.0	5586.4	5597.7	5533.5	5475.0	5410.9	5327.8	5288.2	5242.9	4939.0
22.5°	5820.4	5794.0	5829.8	5818.5	5692.1	5601.5	5522.2	5420.3	5399.5	5378.8	5069.3
25°	6196.0	6180.9	6205.4	6094.1	5871.4	5748.7	5654.3	5539.2	5539.2	5560.0	5216.5
27.5°	6741.4	6684.8	6601.8	6405.5	6071.4	5914.8	5812.9	5690.2	5722.3	5799.7	5410.9
30°	7300.1	7237.8	7047.2	6745.2	6314.9	6150.7	6031.8	5903.5	5978.9	6120.5	5671.3
32.5°	7851.1	7781.3	7511.4	7130.2	6664.0	6499.8	6384.7	6243.2	6369.6	6607.4	6052.6
35°	8385.2	8323.0	8011.6	7562.4	7128.3	6992.4	6886.7	6764.1	6926.4	7258.5	6590.4
37.5°	8985.4	8917.5	8538.1	8051.2	7692.6	7594.5	7517.1	7394.4	7677.5	8164.4	7339.7
40°	9723.3	9608.2	9096.8	8611.7	8345.6	8298.4	8245.6	8228.6	8668.3	9342.1	8338.1
42.5°	10568.8	10380.1	9681.8	9202.4	9062.8	9096.8	9083.5	9159.0	9908.3	10806.6	9553.5
45°	11414.4	11170.9	10332.9	9832.8	9851.7	9970.6	10044.2	10346.1	11461.5	12486.3	10861.4
47.5°	12131.5	11891.8	10957.6	10514.1	10740.6	10974.6	11174.7	11746.5	13058.2	14139.6	11878.6
50°	12744.9	12518.4	11620.1	11263.4	11772.9	12150.4	12475.0	13322.4	14775.6	15398.4	12592.0
52.5°	13246.9	13095.9	12307.0	12122.1	12952.5	13505.5	13981.1	14996.4	16296.8	16421.3	13146.9
55°	13735.7	13628.1	13045.0	13143.1	14337.8	15090.8	15692.8	16772.4	17606.6	17274.4	13679.1
57.5°	14298.1	14200.0	13886.7	14437.8	16159.0	17106.4	17763.2	18346.4	18759.7	18146.3	14181.1
60°	14871.9	14815.3	14822.8	15875.9	18250.1	19159.8	19522.2	19673.1	19892.1	18967.3	14209.4
62.5°	15419.2	15526.8	15892.9	17476.3	20252.5	20950.8	21133.9	21283.0	21026.3	19097.5	13128.0
65°	16345.8	16521.4	17395.2	19618.4	22455.0	23202.4	23391.1	22879.7	21205.6	17414.1	10678.3
67.5°	16798.8	17119.6	18678.5	21615.2	24591.4	25421.8	25352.0	22983.5	19029.6	13279.0	6852.8
69°	16704.4	17046.0	18974.8	22226.7	25301.1	26054.1	25610.6	21713.3	16211.9	9619.5	4206.8
70°	16330.8	16676.1	18822.0	22204.0	25391.6	25988.0	25131.2	20145.0	13707.4	7033.9	2630.9
72.5°	13637.6	13935.8	16710.1	20069.5	23391.1	22906.1	21024.5	13956.5	6679.1	1915.6	592.6
75°	8394.7	8560.8	11990.0	15119.1	17667.0	16421.3	14007.5	6943.4	1991.1	541.7	328.4
77.5°	4435.1	4510.6	6564.0	8911.8	11199.2	9266.6	7179.3	2708.3	917.2	339.7	237.8
80°	2621.5	2678.1	3534.9	4074.7	4846.6	4048.2	2870.6	1662.7	656.8	213.3	211.4
82.5°	1500.4	1536.3	2562.9	2264.8	1909.9	1630.6	1428.7	1575.9	394.4	143.4	218.9
85°	551.1	558.6	1441.9	1723.1	1136.2	675.7	709.6	1306.0	105.7	90.6	171.7
87.5°	256.7	251.0	741.7	1055.0	664.3	428.4	553.0	286.9	41.5	58.5	47.2
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°	4737.1	4737.1	4737.1	4737.1	4737.1	4737.1	4737.1	4737.1	4737.1	4737.1	4737.1
2.5°	4680.5	4610.7	4484.2	4354.0	4221.9	4120.0	4019.9	3940.7	3914.2	3865.2	3869.0
5°	4537.1	4408.7	4144.5	3876.5	3597.2	3366.9	3149.9	2974.4	2889.4	2802.6	2802.6
7.5°	4412.5	4225.7	3812.3	3376.4	2925.3	2546.0	2204.4	1947.7	1806.1	1692.9	1691.0
10°	4365.3	4112.4	3534.9	2910.2	2281.7	1764.6	1358.9	1098.4	964.4	877.6	873.8
12.5°	4386.1	4072.8	3321.6	2479.9	1691.0	1134.3	787.0	619.0	562.4	536.0	536.0
15°	4446.5	4061.5	3108.4	2059.0	1194.7	709.6	522.8	477.5	473.7	473.7	473.7
17.5°	4520.1	4065.2	2889.4	1649.5	813.4	507.7	451.1	445.4	449.2	449.2	449.2
20°	4595.6	4067.1	2653.5	1270.1	573.7	441.6	424.6	422.8	426.5	426.5	428.4
22.5°	4688.0	4076.6	2417.6	949.3	473.7	417.1	403.9	403.9	405.8	405.8	403.9
25°	4793.7	4095.4	2172.3	704.0	432.2	400.1	388.8	386.9	388.8	386.9	385.0
27.5°	4925.8	4121.8	1898.6	551.1	413.3	383.1	373.7	373.7	371.8	369.9	368.0
30°	5091.9	4152.0	1591.0	468.0	394.4	368.0	358.6	356.7	354.8	351.0	351.0
32.5°	5344.8	4218.1	1287.1	424.6	373.7	347.3	339.7	339.7	335.9	332.2	330.3
35°	5733.6	4348.3	1015.4	398.2	351.0	324.6	315.2	315.2	311.4	309.5	307.6
37.5°	6271.5	4546.5	788.9	373.7	328.4	300.1	290.6	288.8	285.0	281.2	279.3
40°	6986.8	4791.8	620.9	351.0	305.7	275.5	268.0	264.2	256.7	251.0	251.0
42.5°	7885.1	5071.2	503.9	326.5	279.3	252.9	247.2	241.6	228.4	222.7	220.8
45°	8825.0	5322.2	426.5	298.2	252.9	230.2	226.5	217.0	200.1	194.4	194.4
47.5°	9502.5	5380.7	375.6	271.8	228.4	205.7	203.8	186.8	171.7	168.0	166.1
50°	9925.3	5265.5	334.1	245.3	205.7	183.1	177.4	156.6	147.2	143.4	141.5
52.5°	10210.3	5059.8	300.1	222.7	185.0	162.3	149.1	134.0	126.4	122.7	122.7
55°	10438.6	4769.2	266.1	201.9	168.0	145.3	126.4	115.1	107.6	103.8	103.8
57.5°	10502.8	4374.7	232.1	185.0	151.0	128.3	107.6	100.0	90.6	88.7	88.7
60°	10036.6	3663.2	205.7	164.2	135.9	111.4	94.4	84.9	75.5	73.6	71.7
62.5°	8808.0	2834.7	181.2	145.3	118.9	96.3	81.2	69.8	62.3	62.3	62.3
65°	6718.8	1900.5	158.5	126.4	103.8	81.2	69.8	56.6	52.8	52.8	54.7
67.5°	4021.8	1034.2	135.9	107.6	88.7	67.9	58.5	49.1	47.2	49.1	49.1
69°	2357.2	607.7	122.7	96.3	77.4	60.4	51.0	43.4	47.2	49.1	49.1
70°	1455.1	409.5	113.2	86.8	69.8	54.7	47.2	41.5	45.3	47.2	47.2
72.5°	405.8	211.4	90.6	67.9	56.6	45.3	37.7	37.7	43.4	45.3	45.3
75°	264.2	156.6	69.8	51.0	43.4	35.9	32.1	35.9	41.5	43.4	43.4
77.5°	218.9	128.3	56.6	41.5	35.9	34.0	30.2	32.1	37.7	39.6	39.6
80°	200.1	90.6	45.3	37.7	32.1	30.2	28.3	26.4	34.0	35.9	35.9
82.5°	190.6	71.7	39.6	34.0	30.2	26.4	24.5	26.4	30.2	32.1	34.0
85°	118.9	47.2	35.9	32.1	26.4	24.5	24.5	24.5	28.3	30.2	30.2
87.5°	43.4	37.7	32.1	26.4	22.6	22.6	22.6	22.6	24.5	28.3	28.3
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)