

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: P301914

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301914
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-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30496 lumens
Efficiency: N/A
Efficacy: 72.8 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

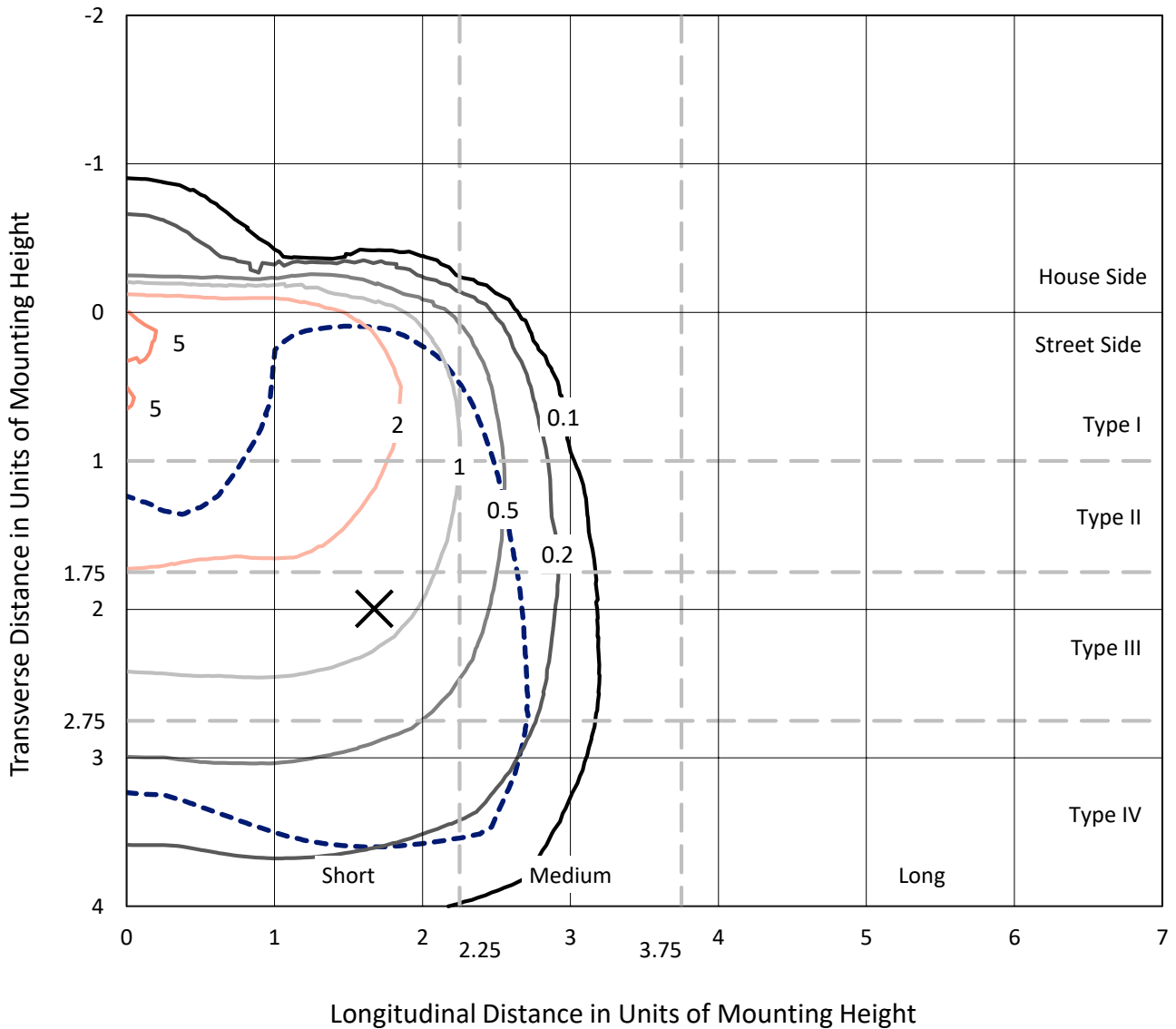


REPORT NUMBER: P301914

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL4-7027-800-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

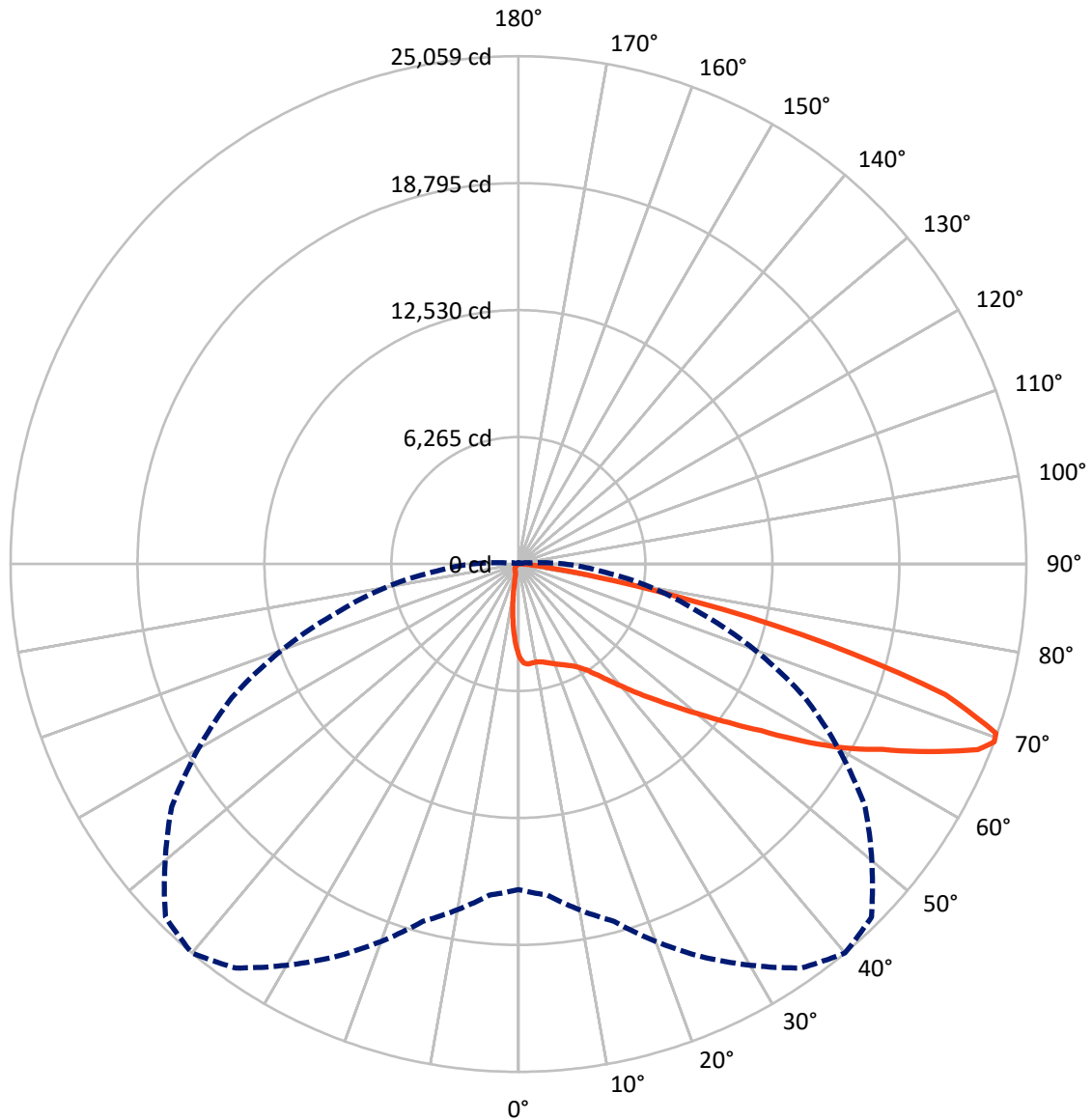


Based on 30 foot mounting height. Maximum calculated value = 5.5 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P301914

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL4-7027-800-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P301914

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL4-7027-800-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1784.2	0.0	1784.2
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	28711.8	0.0	28711.8
	% Fixture	94.1	0.0	94.1
Total	Lumens	30496.0	0.0	30496.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.4	1.2
10°-20°	908.5	3.0
20°-30°	1530.2	5.0
30°-40°	2505.0	8.2
40°-50°	4337.3	14.2
50°-60°	6831.6	22.4
60°-70°	8921.8	29.3
70°-80°	4595.1	15.1
80°-90°	497.1	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°	30496.0	100.0
0°-180°	30496.0	100.0



REPORT NUMBER: P301914

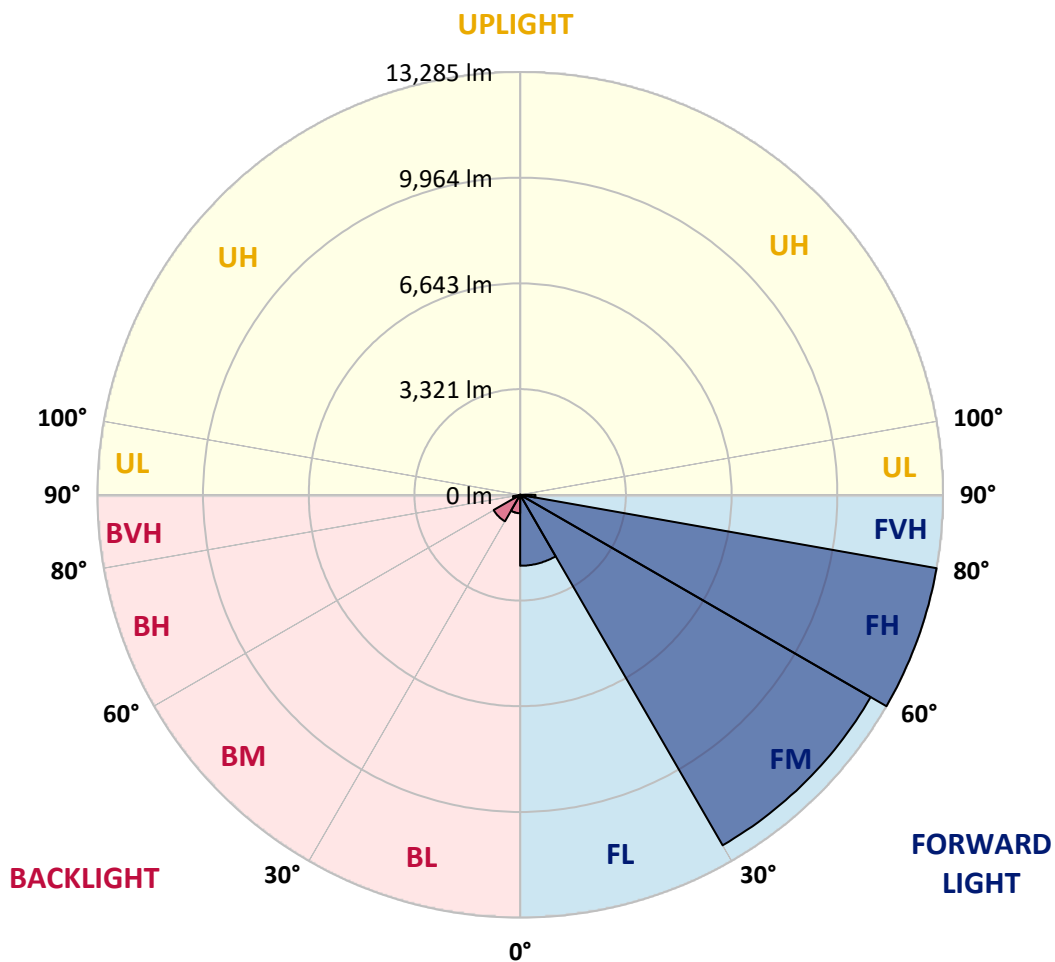
CATALOG NUMBER: GLNA-AF-10-LED-E1-SL4-7027-800-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2230.1	7.3			
FM	(30°-60°)	12714.9	41.7			
FH	(60°-80°)	13285.3	43.6			G5
FVH	(80°-90°)	481.5	1.6			G3/500
BL	(0°-30°)	577.9	1.9	B2/1000		
BM	(30°-60°)	959.0	3.1	B1/1000		
BH	(60°-80°)	231.7	0.8	B1/500		G1/500
BVH	(80°-90°)	15.6	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





REPORT NUMBER: P301914

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL4-7027-800-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	4556.3	4556.3	4556.3	4556.3	4556.3	4556.3	4556.3	4556.3	4556.3	4556.3	4556.3
2.5°	5002.8	4975.6	4959.2	4937.5	4910.2	4886.6	4877.6	4810.4	4746.9	4659.7	4559.9
5°	5095.4	5086.3	5057.3	5028.2	4995.5	4959.2	4939.3	4859.4	4768.6	4641.6	4467.3
7.5°	5104.5	5093.6	5057.3	5017.3	4971.9	4928.4	4893.9	4814.0	4730.5	4601.6	4389.3
10°	5089.9	5077.2	5050.0	5006.4	4950.2	4908.4	4873.9	4797.7	4726.9	4610.7	4374.7
12.5°	5073.6	5060.9	5048.2	5026.4	4977.4	4948.4	4919.3	4846.7	4783.2	4685.1	4427.4
15°	5089.9	5082.7	5097.2	5088.1	5060.9	5035.5	5006.4	4941.1	4883.0	4801.3	4523.6
17.5°	5158.9	5158.9	5204.3	5209.7	5184.3	5148.0	5106.3	5040.9	4991.9	4922.9	4637.9
20°	5320.5	5315.0	5373.1	5384.0	5322.3	5266.0	5204.3	5124.4	5086.3	5042.7	4750.5
22.5°	5598.2	5572.8	5607.3	5596.4	5474.8	5387.6	5311.4	5213.4	5193.4	5173.4	4875.7
25°	5959.4	5944.9	5968.5	5861.4	5647.2	5529.2	5438.5	5327.7	5327.7	5347.7	5017.3
27.5°	6484.0	6429.6	6349.7	6160.9	5839.6	5689.0	5590.9	5473.0	5503.8	5578.2	5204.3
30°	7021.4	6961.5	6778.1	6487.7	6073.8	5915.9	5801.5	5678.1	5750.7	5886.8	5454.8
32.5°	7551.4	7484.2	7224.7	6858.0	6409.6	6251.7	6141.0	6004.8	6126.4	6355.2	5821.5
35°	8065.1	8005.2	7705.7	7273.7	6856.2	6725.5	6623.8	6505.8	6661.9	6981.4	6338.8
37.5°	8642.4	8577.0	8212.2	7743.8	7398.9	7304.5	7230.1	7112.1	7384.4	7852.7	7059.5
40°	9352.1	9241.4	8749.5	8283.0	8027.0	7981.6	7930.8	7914.5	8337.4	8985.4	8019.7
42.5°	10165.4	9983.8	9312.2	8851.1	8716.8	8749.5	8736.8	8809.4	9530.0	10394.1	9188.8
45°	10978.6	10744.4	9938.5	9457.4	9475.6	9589.9	9660.7	9951.2	11024.0	12009.6	10446.7
47.5°	11668.4	11437.8	10539.3	10112.7	10330.5	10555.6	10748.1	11298.1	12559.7	13599.8	11425.1
50°	12258.3	12040.5	11176.4	10833.4	11323.5	11686.5	11998.8	12813.8	14211.5	14810.6	12111.3
52.5°	12741.2	12596.0	11837.2	11659.3	12458.0	12989.9	13447.3	14423.9	15674.6	15794.4	12645.0
55°	13211.3	13107.9	12547.0	12641.3	13790.4	14514.7	15093.7	16132.1	16934.4	16614.9	13156.9
57.5°	13752.3	13657.9	13356.6	13886.6	15542.1	16453.4	17085.1	17646.0	18043.5	17453.6	13639.7
60°	14304.1	14249.7	14256.9	15269.8	17553.4	18428.3	18776.9	18922.1	19132.7	18243.2	13667.0
62.5°	14830.5	14934.0	15286.2	16809.1	19479.4	20151.0	20327.1	20470.5	20223.6	18368.4	12626.8
65°	15721.8	15890.6	16731.1	18869.4	21597.8	22316.6	22498.1	22006.2	20396.1	16749.2	10270.6
67.5°	16157.5	16466.1	17965.5	20790.0	23652.6	24451.3	24384.2	22106.0	18303.1	12772.0	6591.1
69°	16066.7	16395.3	18250.4	21378.1	24335.1	25059.4	24632.8	20884.4	15592.9	9252.3	4046.2
70°	15707.3	16039.5	18103.4	21356.3	24422.3	24995.9	24171.8	19375.9	13184.1	6765.4	2530.4
72.5°	13116.9	13403.7	16072.2	19303.3	22498.1	22031.6	20221.8	13423.7	6424.1	1842.5	570.0
75°	8074.2	8233.9	11532.2	14541.9	16992.5	15794.4	13472.7	6678.3	1915.1	521.0	315.9
77.5°	4265.8	4338.4	6313.4	8571.6	10771.6	8912.8	6905.2	2604.9	882.2	326.7	228.7
80°	2521.4	2575.8	3399.9	3919.1	4661.5	3893.7	2761.0	1599.2	631.7	205.1	203.3
82.5°	1443.1	1477.6	2465.1	2178.3	1837.0	1568.4	1374.1	1515.7	379.4	138.0	210.6
85°	530.1	537.3	1386.8	1657.3	1092.8	649.9	682.5	1256.1	101.7	87.1	165.2
87.5°	246.9	241.4	713.4	1014.7	639.0	412.1	531.9	275.9	39.9	56.3	45.4
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: P301914

CATALOG NUMBER: GLNA-AF-10-LED-E1-SL4-7027-800-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4556.3	4556.3	4556.3	4556.3	4556.3	4556.3	4556.3	4556.3	4556.3	4556.3	4556.3
2.5°	4501.8	4434.6	4313.0	4187.8	4060.7	3962.7	3866.5	3790.2	3764.8	3717.6	3721.2
5°	4363.8	4240.4	3986.3	3728.5	3459.9	3238.4	3029.6	2860.8	2779.1	2695.6	2695.6
7.5°	4244.0	4064.3	3666.8	3247.5	2813.6	2448.8	2120.2	1873.3	1737.2	1628.3	1626.5
10°	4198.7	3955.4	3399.9	2799.1	2194.6	1697.3	1307.0	1056.5	927.6	844.1	840.5
12.5°	4218.6	3917.3	3194.8	2385.2	1626.5	1091.0	757.0	595.4	540.9	515.5	515.5
15°	4276.7	3906.4	2989.7	1980.4	1149.0	682.5	502.8	459.3	455.6	455.6	455.6
17.5°	4347.5	3910.0	2779.1	1586.5	782.4	488.3	433.8	428.4	432.0	432.0	432.0
20°	4420.1	3911.8	2552.2	1221.7	551.8	424.8	408.4	406.6	410.2	410.2	412.1
22.5°	4509.1	3920.9	2325.3	913.1	455.6	401.2	388.5	388.5	390.3	390.3	388.5
25°	4610.7	3939.1	2089.3	677.1	415.7	384.8	373.9	372.1	373.9	372.1	370.3
27.5°	4737.8	3964.5	1826.1	530.1	397.5	368.5	359.4	359.4	357.6	355.8	354.0
30°	4897.5	3993.5	1530.2	450.2	379.4	354.0	344.9	343.1	341.3	337.6	337.6
32.5°	5140.8	4057.1	1238.0	408.4	359.4	334.0	326.7	326.7	323.1	319.5	317.7
35°	5514.7	4182.3	976.6	383.0	337.6	312.2	303.1	303.1	299.5	297.7	295.9
37.5°	6032.1	4372.9	758.8	359.4	315.9	288.6	279.5	277.7	274.1	270.5	268.7
40°	6720.0	4608.9	597.2	337.6	294.1	265.0	257.8	254.1	246.9	241.4	241.4
42.5°	7584.1	4877.6	484.7	314.0	268.7	243.2	237.8	232.4	219.6	214.2	212.4
45°	8488.1	5119.0	410.2	286.8	243.2	221.5	217.8	208.8	192.4	187.0	187.0
47.5°	9139.7	5175.3	361.2	261.4	219.6	197.9	196.0	179.7	165.2	161.6	159.7
50°	9546.4	5064.5	321.3	236.0	197.9	176.1	170.6	150.7	141.6	138.0	136.1
52.5°	9820.5	4866.7	288.6	214.2	177.9	156.1	143.4	128.9	121.6	118.0	118.0
55°	10040.1	4587.1	255.9	194.2	161.6	139.8	121.6	110.7	103.5	99.8	99.8
57.5°	10101.8	4207.7	223.3	177.9	145.2	123.4	103.5	96.2	87.1	85.3	85.3
60°	9653.5	3523.4	197.9	157.9	130.7	107.1	90.8	81.7	72.6	70.8	69.0
62.5°	8471.7	2726.5	174.3	139.8	114.4	92.6	78.1	67.2	59.9	59.9	59.9
65°	6462.3	1827.9	152.5	121.6	99.8	78.1	67.2	54.5	50.8	50.8	52.6
67.5°	3868.3	994.8	130.7	103.5	85.3	65.3	56.3	47.2	45.4	47.2	47.2
69°	2267.2	584.5	118.0	92.6	74.4	58.1	49.0	41.8	45.4	47.2	47.2
70°	1399.6	393.9	108.9	83.5	67.2	52.6	45.4	39.9	43.6	45.4	45.4
72.5°	390.3	203.3	87.1	65.3	54.5	43.6	36.3	36.3	41.8	43.6	43.6
75°	254.1	150.7	67.2	49.0	41.8	34.5	30.9	34.5	39.9	41.8	41.8
77.5°	210.6	123.4	54.5	39.9	34.5	32.7	29.0	30.9	36.3	38.1	38.1
80°	192.4	87.1	43.6	36.3	30.9	29.0	27.2	25.4	32.7	34.5	34.5
82.5°	183.3	69.0	38.1	32.7	29.0	25.4	23.6	25.4	29.0	30.9	32.7
85°	114.4	45.4	34.5	30.9	25.4	23.6	23.6	23.6	27.2	29.0	29.0
87.5°	41.8	36.3	30.9	25.4	21.8	21.8	21.8	21.8	23.6	27.2	27.2
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)