

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: P299839

Luminaire Tested: **GLNA-AF-05-LED-E1-SL3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299839
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)
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-SL3-7027
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Medium OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25761 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

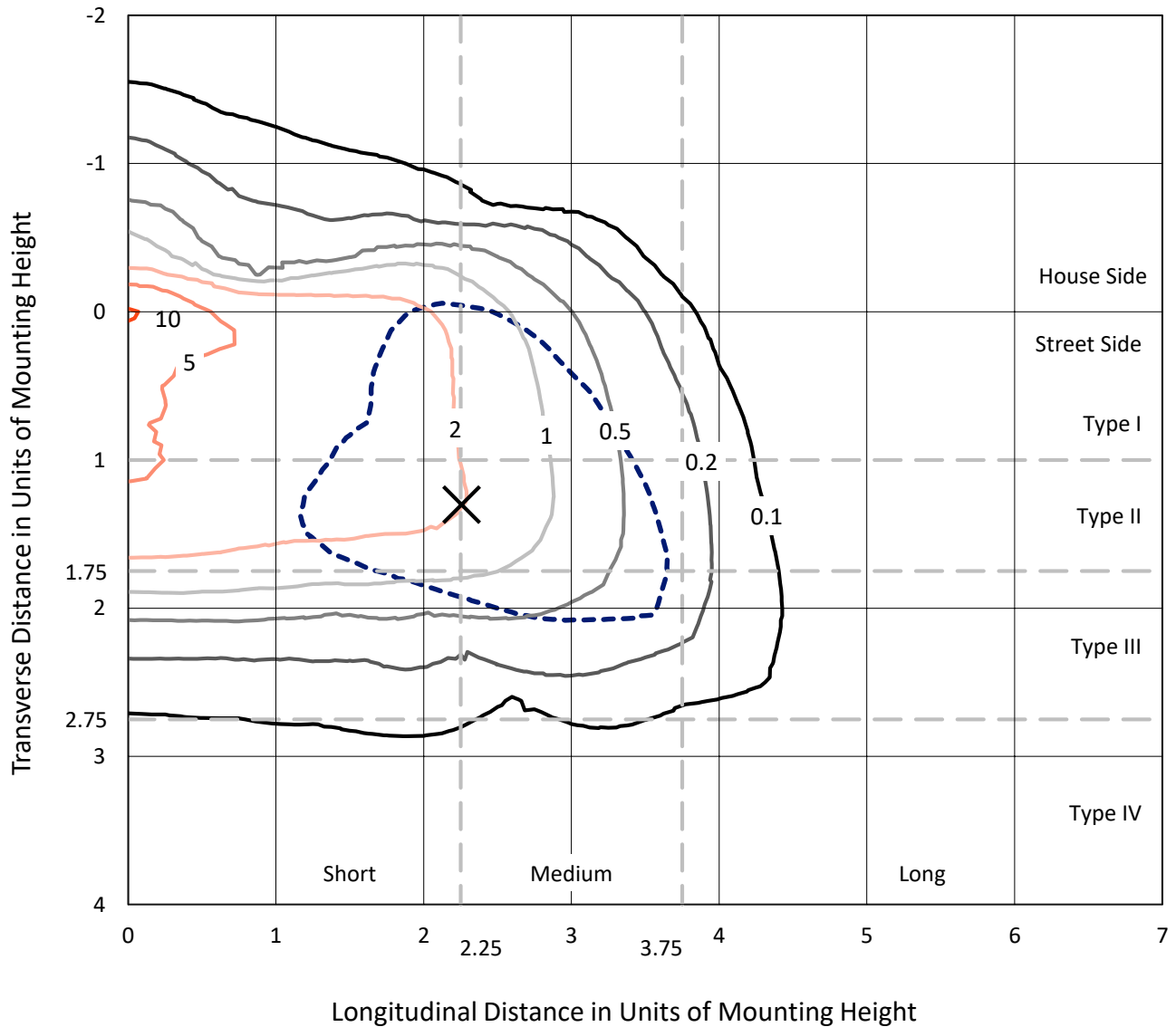
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

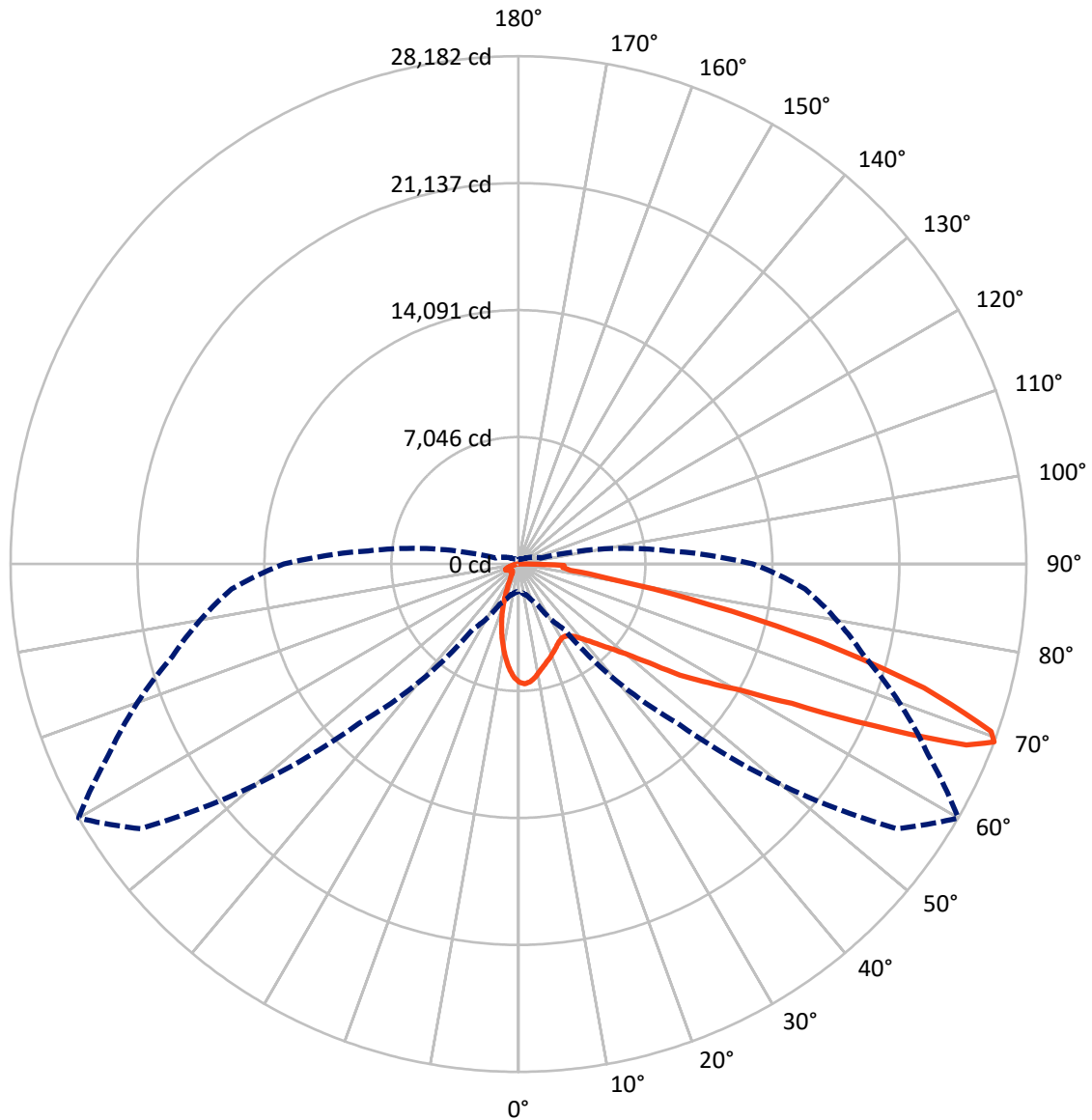
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3665.0	0.0	3665.0
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	22096.1	0.0	22096.1
	% Fixture	85.8	0.0	85.8
Total	Lumens	25761.0	0.0	25761.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	555.0	2.2
10°-20°	1182.5	4.6
20°-30°	1506.8	5.8
30°-40°	2071.4	8.0
40°-50°	3361.1	13.0
50°-60°	5390.3	20.9
60°-70°	7174.1	27.8
70°-80°	3873.5	15.0
80°-90°	646.3	2.5
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°	25761.0	100.0
0°-180°	25761.0	100.0



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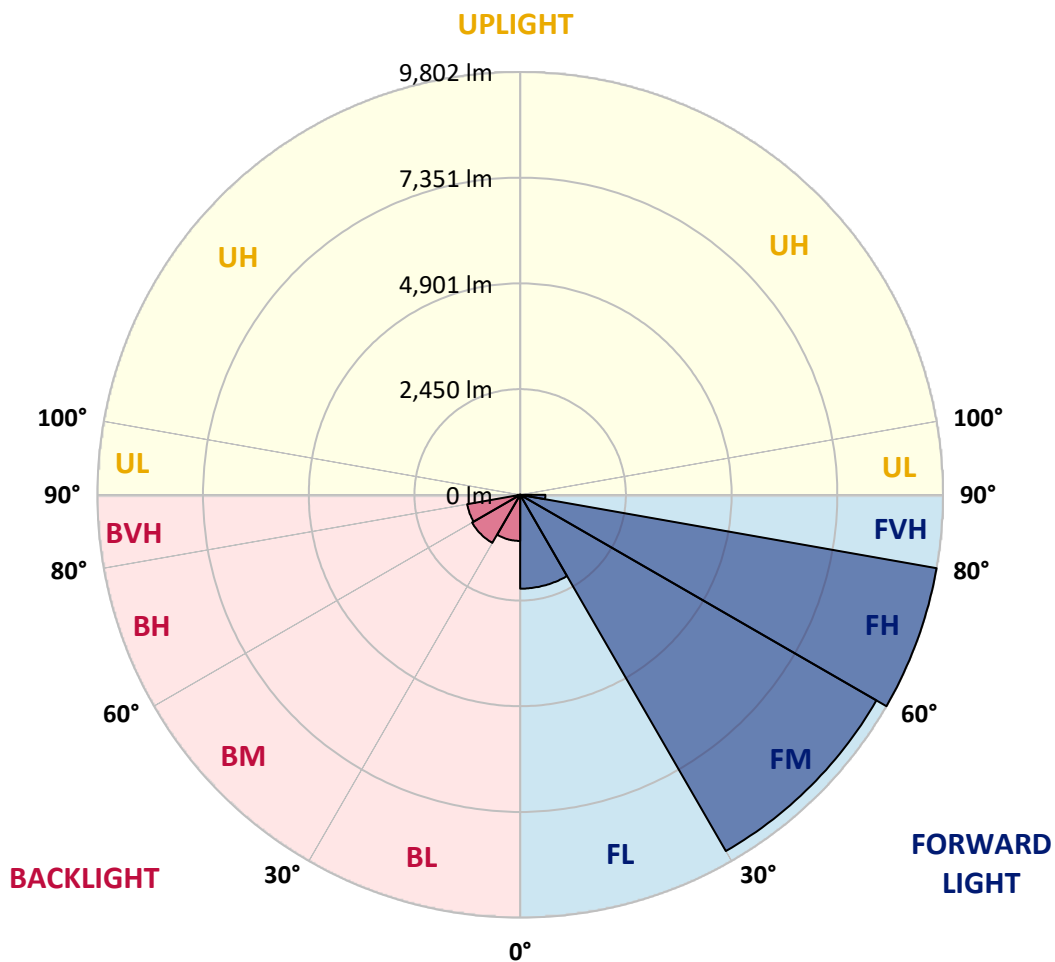
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2175.2	8.4			
FM	(30°-60°)	9535.2	37.0			
FH	(60°-80°)	9801.6	38.0			G4/12000
FVH	(80°-90°)	584.1	2.3			G4/750
BL	(0°-30°)	1069.2	4.2	B3/2500		
BM	(30°-60°)	1287.6	5.0	B2/2500		
BH	(60°-80°)	1246.0	4.8	B3/2500		G3/2500
BVH	(80°-90°)	62.2	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	6564.3	6564.3	6564.3	6564.3	6564.3	6564.3	6564.3	6564.3	6564.3	6564.3	6564.3
2.5°	6698.7	6713.6	6707.4	6703.7	6714.9	6697.5	6661.4	6650.2	6632.8	6591.7	6522.0
5°	6447.3	6492.1	6489.6	6523.2	6579.2	6594.2	6578.0	6580.5	6548.1	6497.1	6381.4
7.5°	6013.0	6031.7	6041.7	6115.1	6217.1	6299.2	6368.9	6391.3	6376.4	6332.8	6183.5
10°	5565.0	5580.0	5603.6	5689.5	5818.9	5932.1	6064.1	6140.0	6172.3	6164.8	5998.1
12.5°	5180.5	5195.4	5226.6	5323.6	5477.9	5617.3	5808.9	5903.5	5980.7	6026.7	5847.5
15°	4835.8	4868.2	4898.0	5010.0	5183.0	5365.9	5582.5	5701.9	5821.4	5924.7	5714.4
17.5°	4567.0	4599.4	4616.8	4718.8	4903.0	5127.0	5380.9	5521.5	5670.8	5840.1	5582.5
20°	4411.5	4426.4	4418.9	4476.2	4641.7	4879.4	5180.5	5343.5	5524.0	5760.4	5450.6
22.5°	4367.9	4369.2	4341.8	4335.6	4442.6	4642.9	4966.5	5164.3	5385.8	5708.1	5337.3
25°	4473.7	4470.0	4395.3	4334.3	4345.5	4462.5	4759.9	4990.1	5270.1	5696.9	5250.2
27.5°	4708.9	4720.1	4609.3	4494.8	4381.6	4377.9	4603.1	4845.8	5175.5	5748.0	5212.9
30°	5038.7	5057.3	4939.1	4793.5	4580.7	4405.2	4542.1	4759.9	5117.0	5853.7	5206.6
32.5°	5399.5	5419.4	5329.8	5176.8	4898.0	4574.5	4584.4	4767.4	5114.6	6001.8	5249.0
35°	5784.1	5806.5	5760.4	5631.0	5321.1	4886.8	4746.2	4888.1	5195.4	6228.3	5362.2
37.5°	6213.4	6248.2	6260.7	6137.5	5806.5	5298.7	5011.3	5117.0	5378.4	6543.2	5570.0
40°	6831.9	6880.4	6876.7	6699.9	6362.7	5855.0	5420.7	5448.1	5663.3	6963.8	5902.3
42.5°	8016.5	8026.5	7716.6	7332.1	6975.0	6439.9	5903.5	5881.1	6056.6	7496.4	6391.3
45°	9523.5	9482.5	8793.1	8050.1	7614.6	7111.9	6532.0	6422.4	6555.6	8146.0	7003.6
47.5°	10774.2	10679.6	9808.5	8783.1	8291.6	7842.3	7269.9	7078.3	7151.7	8882.7	7795.0
50°	11208.5	11137.5	10415.8	9392.9	8932.4	8733.3	8178.3	7907.0	7926.9	9761.2	8722.1
52.5°	11115.1	11105.2	10623.6	9794.8	9532.2	9669.1	9465.0	9097.9	8903.8	10736.8	9722.6
55°	10894.9	10916.0	10741.8	10262.7	10217.9	10572.6	11146.3	10875.0	10271.4	11721.2	10756.8
57.5°	10129.6	10184.3	10567.6	10851.3	11321.7	11849.4	12500.2	12423.0	11743.6	12785.2	11986.2
60°	8160.9	8287.8	9315.7	10736.8	12457.9	14108.0	14399.2	14220.0	13261.8	14105.5	13610.2
62.5°	5718.1	5850.0	7072.0	9295.8	12271.2	16659.0	17793.9	17021.2	15442.0	16050.5	15712.0
65°	3061.3	3124.7	4058.0	6449.8	10359.8	17185.4	22755.4	21579.5	18894.0	18448.5	17510.2
67.5°	1688.7	1723.5	2080.7	3256.6	6635.2	15133.4	25916.3	26804.8	23208.4	20045.1	17182.9
69°	1526.9	1559.3	1793.2	2466.4	4440.1	12512.6	25607.6	28182.3	25099.9	19887.1	15973.4
70°	1493.3	1523.2	1733.5	2273.6	3593.9	10313.7	24573.5	27830.2	25550.4	19320.8	14918.1
72.5°	1344.0	1376.3	1580.4	2042.1	3071.2	5141.9	19465.2	23530.7	23197.2	16752.4	11315.5
75°	1253.1	1283.0	1628.9	1999.8	2940.6	3254.2	12832.4	17342.2	17052.3	11718.7	6101.4
77.5°	536.3	533.9	755.4	1692.4	2984.1	3150.9	6895.3	10833.9	9884.4	5008.8	1752.1
80°	358.4	352.2	358.4	497.8	2736.5	3168.3	3612.5	5499.1	4153.9	1276.8	863.6
82.5°	308.6	303.6	314.8	303.6	961.9	3616.3	3071.2	2924.4	1974.9	725.5	428.1
85°	207.8	199.1	271.3	272.5	454.2	3213.1	3459.5	2470.2	1597.8	430.6	211.6
87.5°	99.6	97.1	158.0	192.9	266.3	1305.4	3881.3	2531.1	1611.5	220.3	100.8
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°	6564.3	6564.3	6564.3	6564.3	6564.3	6564.3	6564.3	6564.3	6564.3	6564.3	6564.3
2.5°	6500.8	6449.8	6400.0	6340.3	6278.1	6208.4	6173.6	6138.7	6130.0	6120.1	6085.2
5°	6321.6	6249.5	6125.0	5988.1	5843.8	5703.2	5596.2	5529.0	5477.9	5451.8	5405.8
7.5°	6090.2	5984.4	5766.6	5530.2	5287.5	5066.0	4874.4	4753.7	4639.2	4585.7	4524.7
10°	5869.9	5711.9	5373.4	5025.0	4676.5	4341.8	4026.9	3804.2	3606.3	3495.6	3417.2
12.5°	5680.8	5464.2	4995.1	4523.5	4045.6	3569.0	3097.4	2726.5	2416.7	2253.6	2170.3
15°	5496.6	5235.3	4635.5	4036.9	3423.4	2775.1	2155.3	1734.7	1478.4	1376.3	1341.5
17.5°	5329.8	4995.1	4274.6	3546.6	2781.3	1997.3	1448.5	1217.0	1118.7	1085.1	1073.9
20°	5149.4	4752.4	3900.0	3033.9	2111.8	1396.2	1131.2	1029.1	989.3	979.4	974.4
22.5°	4975.2	4513.5	3541.6	2485.1	1516.9	1077.7	971.9	929.6	923.4	932.1	932.1
25°	4827.1	4299.5	3154.6	1911.4	1113.8	907.2	869.8	859.9	883.5	915.9	922.1
27.5°	4716.3	4124.0	2742.7	1411.2	887.3	789.0	787.7	803.9	862.4	924.6	937.0
30°	4640.4	3957.3	2302.2	1017.9	744.2	694.4	714.3	749.1	835.0	923.4	947.0
32.5°	4601.9	3834.1	1843.0	787.7	637.1	609.8	643.4	685.7	770.3	852.4	883.5
35°	4631.7	3743.2	1409.9	657.1	562.5	541.3	576.2	617.2	667.0	701.9	725.5
37.5°	4743.7	3707.1	1064.0	588.6	511.5	491.5	518.9	542.6	562.5	572.4	583.6
40°	4985.1	3745.7	852.4	553.8	482.8	457.9	469.1	477.9	490.3	500.3	505.2
42.5°	5341.0	3861.4	764.1	540.1	467.9	431.8	429.3	433.1	449.2	467.9	471.6
45°	5838.8	4065.5	757.9	548.8	460.4	410.7	399.5	404.4	429.3	457.9	462.9
47.5°	6474.7	4376.6	807.6	574.9	466.7	399.5	380.8	387.0	418.1	456.7	462.9
50°	7245.0	4810.9	891.0	613.5	494.0	401.9	374.6	378.3	410.7	453.0	459.2
52.5°	8154.7	5426.9	981.8	650.8	522.7	418.1	379.5	370.8	400.7	438.0	445.5
55°	9166.4	6217.1	1075.2	684.4	537.6	438.0	389.5	360.9	382.0	413.1	419.4
57.5°	10408.3	7322.2	1237.0	716.8	547.5	451.7	399.5	350.9	358.4	380.8	385.8
60°	12089.5	8885.1	1521.9	770.3	569.9	456.7	398.2	342.2	334.7	347.2	349.7
62.5°	14104.2	10582.5	1759.6	837.5	607.3	460.4	390.7	336.0	314.8	314.8	317.3
65°	15300.1	11036.7	1627.7	893.5	638.4	456.7	382.0	329.8	299.9	286.2	287.5
67.5°	14285.9	9706.5	1395.0	904.7	637.1	439.3	368.3	318.6	285.0	263.8	262.6
69°	13015.4	8374.9	1290.5	874.8	607.3	416.9	350.9	306.1	273.8	251.4	250.1
70°	11991.2	7562.3	1222.0	842.5	574.9	400.7	337.2	294.9	265.1	243.9	241.4
72.5°	8718.4	4955.3	1044.1	724.3	474.1	336.0	291.2	258.8	236.4	224.0	221.5
75°	4356.7	2363.2	847.4	587.4	363.4	268.8	238.9	216.5	205.3	202.8	201.6
77.5°	1431.1	1082.6	606.0	438.0	270.0	210.3	192.9	176.7	174.2	181.7	179.2
80°	786.5	629.7	384.5	289.9	184.2	154.3	151.8	143.1	146.8	159.3	156.8
82.5°	400.7	327.3	237.7	174.2	124.4	110.8	120.7	115.7	120.7	131.9	130.7
85°	197.9	179.2	150.6	105.8	82.1	70.9	85.9	89.6	92.1	100.8	100.8
87.5°	114.5	105.8	79.6	49.8	41.1	37.3	49.8	48.5	57.2	62.2	61.0
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)