

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: P299977

Luminaire Tested: **GLNA-AF-08-LED-E1-SL3-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299977
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-08-LED-E1-SL3-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Medium OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27212 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

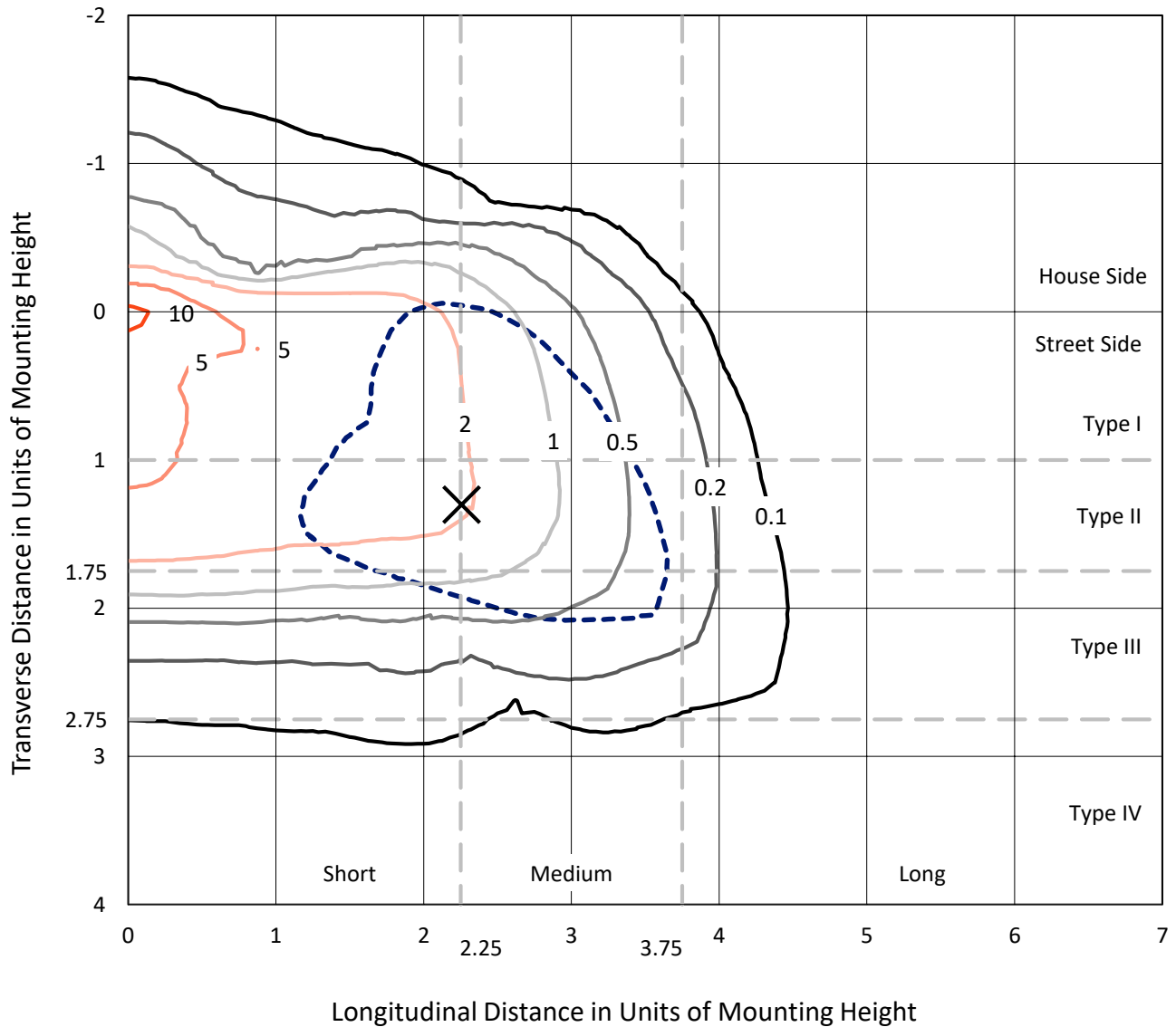
Input Watts (W): 257
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

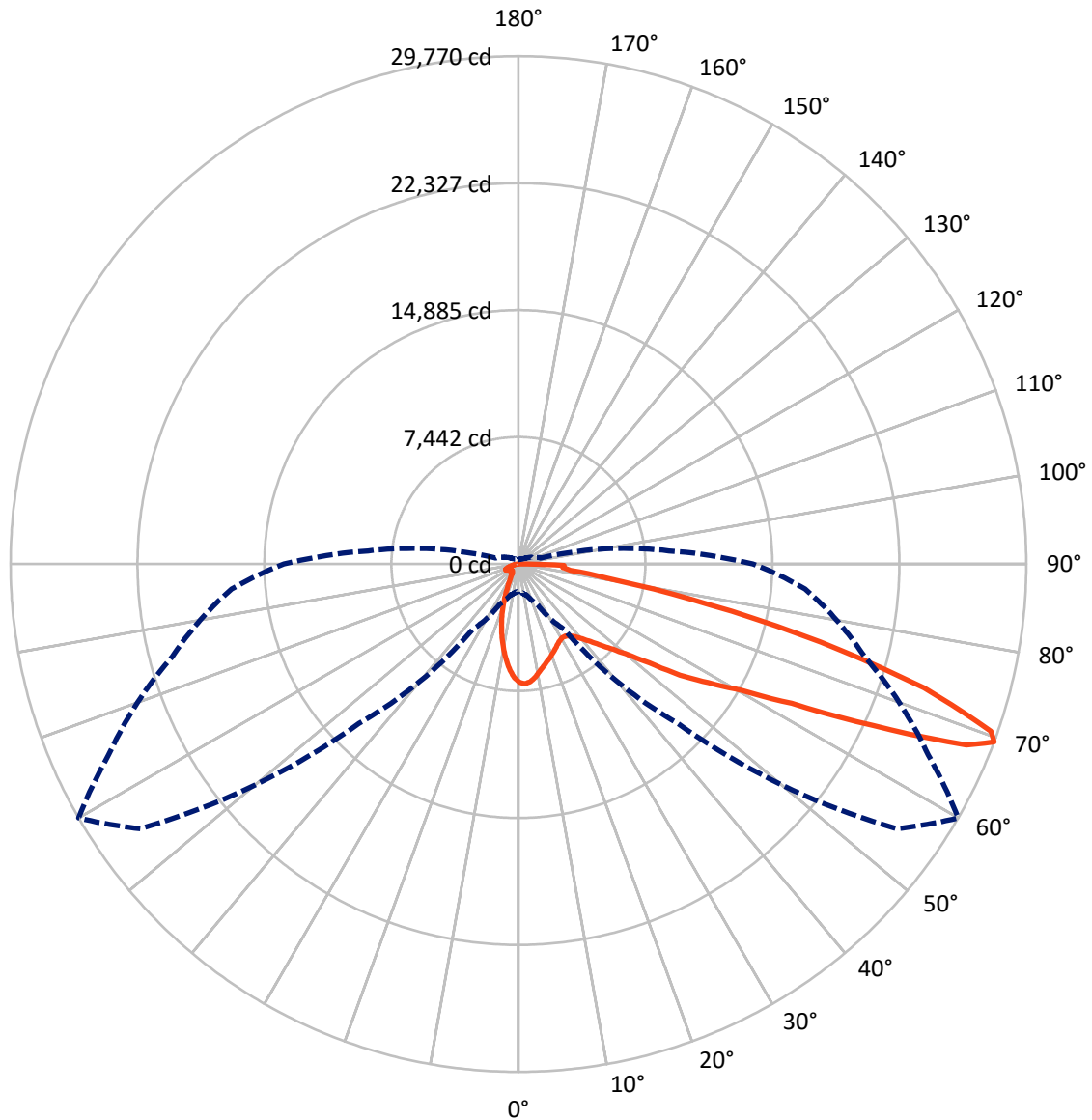
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 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	3871.4	0.0	3871.4
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	23340.6	0.0	23340.6
	% Fixture	85.8	0.0	85.8
Total	Lumens	27212.0	0.0	27212.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	586.3	2.2
10°-20°	1249.1	4.6
20°-30°	1591.6	5.8
30°-40°	2188.1	8.0
40°-50°	3550.4	13.0
50°-60°	5693.9	20.9
60°-70°	7578.2	27.8
70°-80°	4091.6	15.0
80°-90°	682.7	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°	27212.0	100.0
0°-180°	27212.0	100.0



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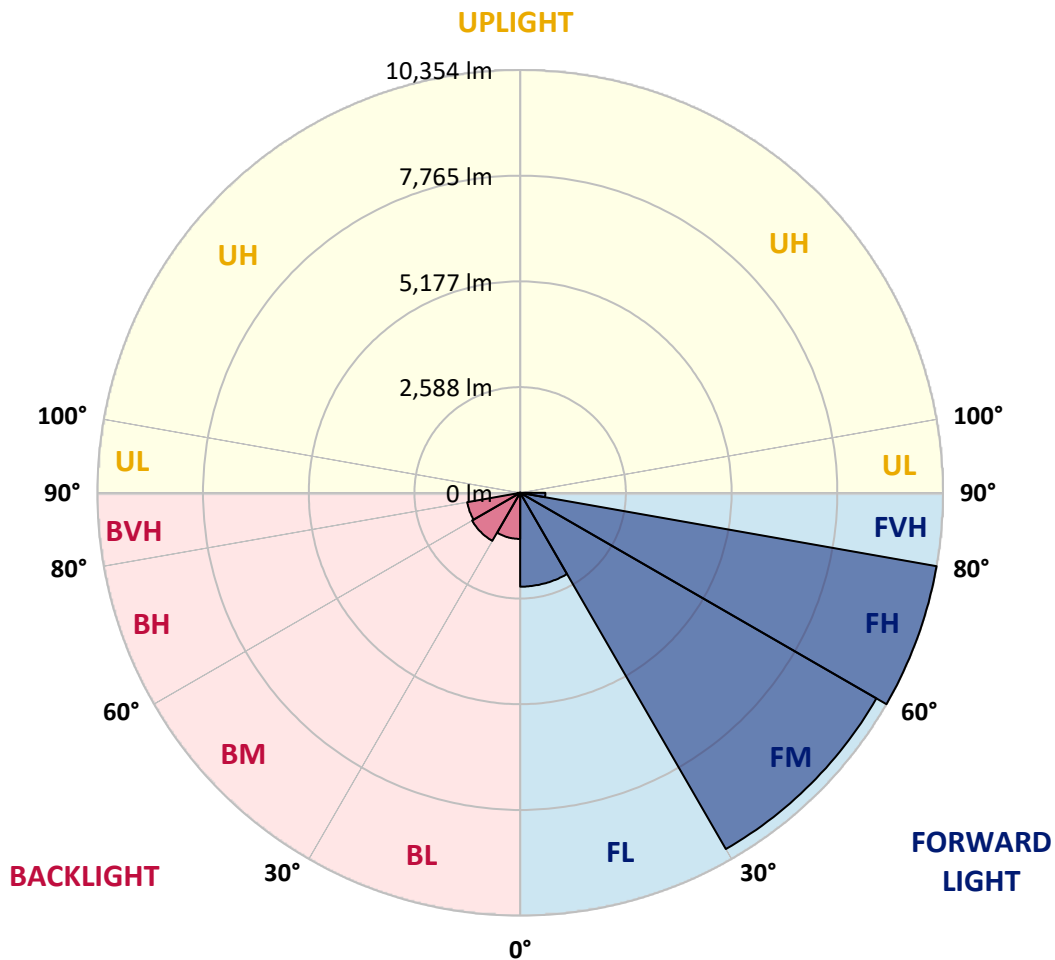
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2297.7	8.4			
FM (30°-60°)	10072.3	37.0			
FH (60°-80°)	10353.6	38.0			G4/12000
FVH (80°-90°)	617.0	2.3			G4/750
BL (0°-30°)	1129.4	4.2	B3/2500		
BM (30°-60°)	1360.1	5.0	B2/2500		
BH (60°-80°)	1316.2	4.8	B3/2500		G3/2500
BVH (80°-90°)	65.7	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°	6934.0	6934.0	6934.0	6934.0	6934.0	6934.0	6934.0	6934.0	6934.0	6934.0	6934.0
2.5°	7076.0	7091.8	7085.2	7081.3	7093.1	7074.7	7036.6	7024.7	7006.3	6963.0	6889.3
5°	6810.5	6857.8	6855.2	6890.7	6949.8	6965.6	6948.5	6951.1	6916.9	6863.1	6740.8
7.5°	6351.7	6371.4	6381.9	6459.5	6567.3	6654.0	6727.7	6751.3	6735.5	6689.5	6531.8
10°	5878.5	5894.3	5919.2	6009.9	6146.6	6266.3	6405.6	6485.8	6520.0	6512.1	6335.9
12.5°	5472.3	5488.1	5520.9	5623.5	5786.5	5933.7	6136.1	6236.0	6317.5	6366.2	6176.9
15°	5108.2	5142.4	5173.9	5292.2	5474.9	5668.2	5896.9	6023.1	6149.3	6258.4	6036.2
17.5°	4824.2	4858.4	4876.8	4984.6	5179.2	5415.8	5683.9	5832.5	5990.2	6169.0	5896.9
20°	4659.9	4675.7	4667.8	4728.3	4903.1	5154.2	5472.3	5644.5	5835.1	6084.9	5757.5
22.5°	4613.9	4615.2	4586.3	4579.7	4692.8	4904.4	5246.2	5455.2	5689.2	6029.7	5637.9
25°	4725.7	4721.7	4642.8	4578.4	4590.3	4713.8	5028.0	5271.2	5566.9	6017.8	5545.9
27.5°	4974.1	4985.9	4868.9	4748.0	4628.4	4624.4	4862.4	5118.7	5467.0	6071.7	5506.5
30°	5322.4	5342.2	5217.3	5063.5	4838.7	4653.4	4798.0	5028.0	5405.3	6183.4	5499.9
32.5°	5703.7	5724.7	5630.0	5468.4	5173.9	4832.1	4842.7	5035.9	5402.6	6339.9	5544.6
35°	6109.8	6133.5	6084.9	5948.2	5620.8	5162.1	5013.5	5163.4	5488.1	6579.1	5664.2
37.5°	6563.3	6600.1	6613.3	6483.2	6133.5	5597.2	5293.5	5405.3	5681.3	6911.7	5883.7
40°	7216.7	7267.9	7264.0	7077.3	6721.1	6184.8	5726.0	5754.9	5982.3	7356.0	6234.7
42.5°	8468.1	8478.6	8151.3	7745.1	7367.8	6802.6	6236.0	6212.4	6397.7	7918.6	6751.3
45°	10059.9	10016.6	9288.3	8503.6	8043.5	7512.4	6899.9	6784.2	6924.8	8604.8	7398.1
47.5°	11381.0	11281.1	10361.0	9277.8	8758.6	8284.0	7679.4	7476.9	7554.5	9383.0	8234.1
50°	11839.8	11764.9	11002.4	9921.9	9435.5	9225.2	8639.0	8352.4	8373.4	10311.0	9213.4
52.5°	11741.2	11730.7	11222.0	10346.5	10069.1	10213.7	9998.2	9610.4	9405.3	11341.6	10270.3
55°	11508.5	11530.9	11346.8	10840.8	10793.4	11168.1	11774.1	11487.5	10850.0	12381.4	11362.6
57.5°	10700.1	10757.9	11162.8	11462.5	11959.4	12516.8	13204.2	13122.7	12405.0	13505.3	12661.3
60°	8620.5	8754.6	9840.4	11341.6	13159.5	14902.6	15210.2	15020.9	14008.7	14900.0	14376.8
62.5°	6040.2	6179.5	7470.4	9819.4	12962.4	17597.3	18796.2	17979.9	16311.7	16954.5	16597.0
65°	3233.7	3300.7	4286.6	6813.1	10943.3	18153.4	24037.1	22794.9	19958.2	19487.6	18496.5
67.5°	1783.8	1820.6	2197.9	3440.1	7009.0	15985.7	27376.0	28314.5	24515.6	21174.1	18150.7
69°	1612.9	1647.1	1894.2	2605.4	4690.2	13217.4	27050.0	29769.7	26513.6	21007.2	16873.0
70°	1577.4	1609.0	1831.1	2401.6	3796.3	10894.6	25957.6	29397.7	26989.5	20409.1	15758.3
72.5°	1419.7	1453.8	1669.4	2157.1	3244.2	5431.6	20561.5	24856.0	24503.8	17695.9	11952.8
75°	1323.7	1355.3	1720.7	2112.4	3106.2	3437.4	13555.2	18319.0	18012.7	12378.7	6445.0
77.5°	566.6	563.9	797.9	1787.7	3152.2	3328.3	7283.7	11444.1	10441.1	5290.9	1850.8
80°	378.6	372.0	378.6	525.8	2890.6	3346.7	3816.0	5808.8	4387.8	1348.7	912.3
82.5°	326.0	320.7	332.6	320.7	1016.1	3820.0	3244.2	3089.1	2086.1	766.4	452.2
85°	219.5	210.3	286.6	287.9	479.8	3394.1	3654.3	2609.3	1687.8	454.8	223.5
87.5°	105.2	102.5	166.9	203.7	281.3	1378.9	4100.0	2673.7	1702.3	232.7	106.5
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°	6934.0	6934.0	6934.0	6934.0	6934.0	6934.0	6934.0	6934.0	6934.0	6934.0	6934.0
2.5°	6867.0	6813.1	6760.5	6697.4	6631.7	6558.1	6521.3	6484.5	6475.3	6464.8	6427.9
5°	6677.7	6601.5	6470.0	6325.4	6172.9	6024.4	5911.3	5840.4	5786.5	5758.9	5710.2
7.5°	6433.2	6321.5	6091.4	5841.7	5585.3	5351.4	5148.9	5021.4	4900.5	4844.0	4779.6
10°	6200.5	6033.6	5676.0	5308.0	4939.9	4586.3	4253.8	4018.5	3809.4	3692.5	3609.6
12.5°	6000.7	5772.0	5276.4	4778.2	4273.5	3770.0	3271.8	2880.1	2552.8	2380.6	2292.5
15°	5806.2	5530.1	4896.5	4264.3	3616.2	2931.4	2276.7	1832.4	1561.6	1453.8	1417.0
17.5°	5630.0	5276.4	4515.3	3746.4	2937.9	2109.8	1530.1	1285.6	1181.7	1146.3	1134.4
20°	5439.4	5020.1	4119.7	3204.8	2230.7	1474.9	1194.9	1087.1	1045.0	1034.5	1029.3
22.5°	5255.4	4767.7	3741.1	2625.1	1602.4	1138.4	1026.6	981.9	975.4	984.6	984.6
25°	5099.0	4541.6	3332.3	2019.1	1176.5	958.3	918.8	908.3	933.3	967.5	974.1
27.5°	4982.0	4356.3	2897.2	1490.7	937.2	833.4	832.1	849.2	911.0	976.7	989.8
30°	4901.8	4180.1	2431.8	1075.3	786.1	733.5	754.5	791.3	882.0	975.4	1000.3
32.5°	4861.1	4050.0	1946.8	832.1	673.0	644.1	679.6	724.3	813.7	900.4	933.3
35°	4892.6	3954.0	1489.3	694.1	594.2	571.8	608.6	652.0	704.6	741.4	766.4
37.5°	5010.9	3915.9	1123.9	621.8	540.3	519.2	548.2	573.1	594.2	604.7	616.5
40°	5265.9	3956.7	900.4	585.0	510.0	483.7	495.6	504.8	517.9	528.4	533.7
42.5°	5641.9	4078.9	807.1	570.5	494.3	456.1	453.5	457.4	474.5	494.3	498.2
45°	6167.7	4294.5	800.5	579.7	486.4	433.8	422.0	427.2	453.5	483.7	489.0
47.5°	6839.4	4623.1	853.1	607.3	492.9	422.0	402.2	408.8	441.7	482.4	489.0
50°	7653.1	5081.9	941.2	648.1	521.9	424.6	395.7	399.6	433.8	478.5	485.1
52.5°	8614.0	5732.6	1037.1	687.5	552.1	441.7	400.9	391.7	423.3	462.7	470.6
55°	9682.7	6567.3	1135.7	723.0	567.9	462.7	411.4	381.2	403.6	436.4	443.0
57.5°	10994.6	7734.6	1306.6	757.2	578.4	477.2	422.0	370.7	378.6	402.2	407.5
60°	12770.5	9385.6	1607.6	813.7	602.0	482.4	420.6	361.5	353.6	366.7	369.4
62.5°	14898.6	11178.6	1858.7	884.7	641.5	486.4	412.8	354.9	332.6	332.6	335.2
65°	16161.9	11658.4	1719.4	943.8	674.3	482.4	403.6	348.3	316.8	302.3	303.7
67.5°	15090.6	10253.2	1473.6	955.6	673.0	464.0	389.1	336.5	301.0	278.7	277.4
69°	13748.4	8846.6	1363.1	924.1	641.5	440.4	370.7	323.4	289.2	265.5	264.2
70°	12666.6	7988.3	1290.8	889.9	607.3	423.3	356.2	311.5	280.0	257.6	255.0
72.5°	9209.4	5234.4	1102.9	765.0	500.8	354.9	307.6	273.4	249.8	236.6	234.0
75°	4602.1	2496.3	895.2	620.4	383.8	283.9	252.4	228.7	216.9	214.3	213.0
77.5°	1511.7	1143.6	640.2	462.7	285.2	222.2	203.7	186.7	184.0	191.9	189.3
80°	830.8	665.1	406.2	306.3	194.5	163.0	160.4	151.2	155.1	168.3	165.6
82.5°	423.3	345.7	251.1	184.0	131.5	117.0	127.5	122.2	127.5	139.3	138.0
85°	209.0	189.3	159.1	111.7	86.8	74.9	90.7	94.6	97.3	106.5	106.5
87.5°	120.9	111.7	84.1	52.6	43.4	39.4	52.6	51.3	60.5	65.7	64.4
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)