

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: P299900

Luminaire Tested: **GLNA-AF-05-LED-E1-SL3-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299900
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-SL3-7030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Medium OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23169.9 lumens
Efficiency: N/A
Efficacy: 110.3 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

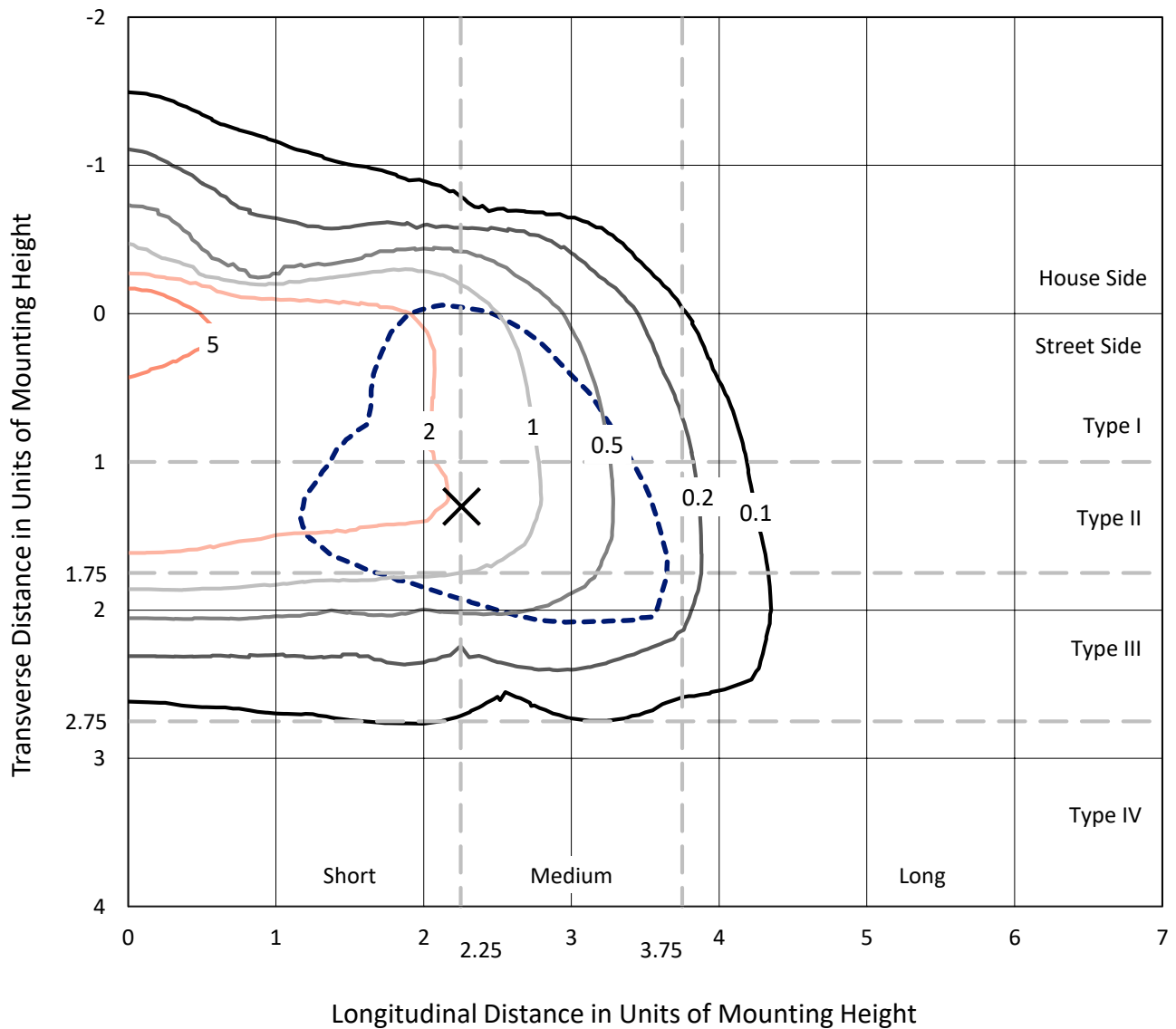
Input Watts (W): 210
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

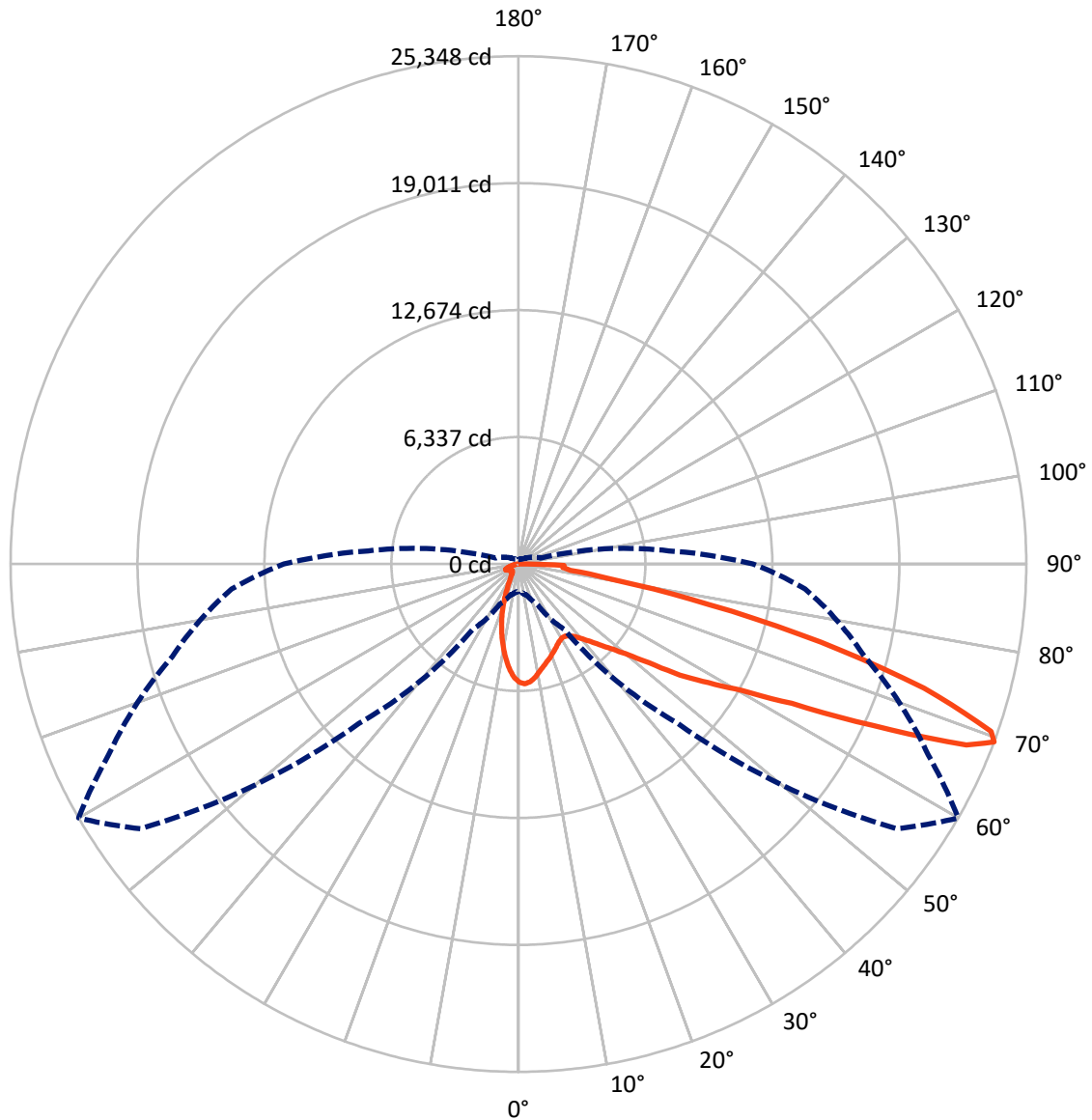
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 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	3296.3	0.0	3296.3
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	19873.5	0.0	19873.5
	% Fixture	85.8	0.0	85.8
Total	Lumens	23169.9	0.0	23169.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	499.2	2.2
10°-20°	1063.6	4.6
20°-30°	1355.2	5.8
30°-40°	1863.1	8.0
40°-50°	3023.0	13.0
50°-60°	4848.1	20.9
60°-70°	6452.5	27.8
70°-80°	3483.9	15.0
80°-90°	581.3	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°	23169.9	100.0
0°-180°	23169.9	100.0

Coefficient of Utilization



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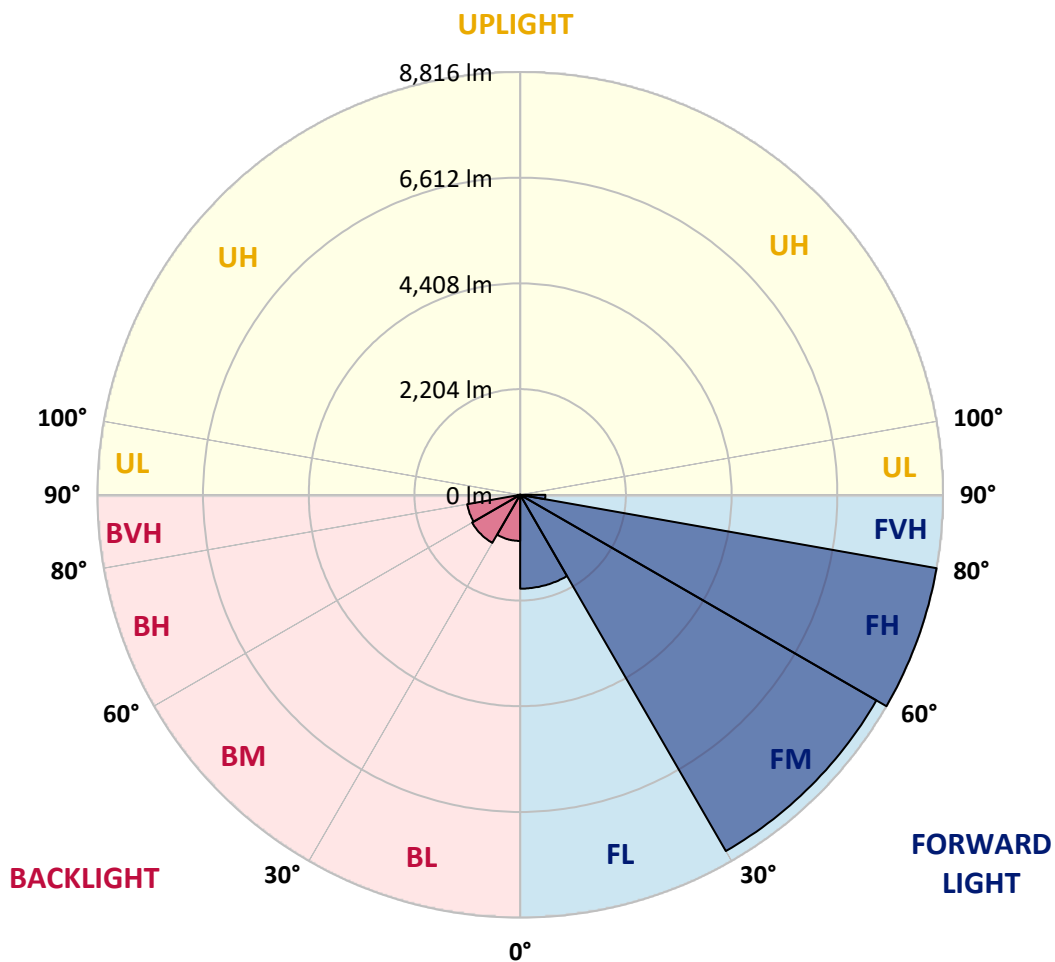
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1956.4	8.4			
FM (30°-60°)	8576.1	37.0			
FH (60°-80°)	8815.7	38.0			G4/12000
FVH (80°-90°)	525.3	2.3			G4/750
BL (0°-30°)	961.6	4.2	B2/1000		
BM (30°-60°)	1158.1	5.0	B2/2500		
BH (60°-80°)	1120.7	4.8	B3/2500		G3/2500
BVH (80°-90°)	56.0	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°	5904.0	5904.0	5904.0	5904.0	5904.0	5904.0	5904.0	5904.0	5904.0	5904.0	5904.0
2.5°	6024.9	6038.3	6032.7	6029.4	6039.5	6023.8	5991.3	5981.3	5965.6	5928.7	5866.0
5°	5798.8	5839.1	5836.9	5867.1	5917.5	5930.9	5916.3	5918.6	5889.5	5843.6	5739.5
7.5°	5408.2	5425.0	5434.0	5500.0	5591.8	5665.6	5728.3	5748.5	5735.0	5695.9	5561.5
10°	5005.3	5018.7	5040.0	5117.2	5233.6	5335.5	5454.1	5522.4	5551.5	5544.8	5394.8
12.5°	4659.4	4672.9	4700.8	4788.1	4926.9	5052.3	5224.7	5309.7	5379.1	5420.5	5259.3
15°	4349.4	4378.5	4405.4	4506.1	4661.7	4826.2	5020.9	5128.4	5235.8	5328.7	5139.6
17.5°	4107.6	4136.7	4152.4	4244.2	4409.8	4611.3	4839.6	4966.1	5100.4	5252.6	5020.9
20°	3967.7	3981.2	3974.5	4025.9	4174.8	4388.6	4659.4	4806.1	4968.3	5181.0	4902.3
22.5°	3928.6	3929.7	3905.1	3899.5	3995.7	4175.9	4466.9	4644.9	4844.1	5134.0	4800.5
25°	4023.7	4020.3	3953.2	3898.3	3908.4	4013.6	4281.1	4488.2	4740.0	5123.9	4722.1
27.5°	4235.2	4245.3	4145.7	4042.7	3940.9	3937.5	4140.1	4358.4	4655.0	5169.8	4688.5
30°	4531.8	4548.6	4442.3	4311.3	4120.0	3962.1	4085.3	4281.1	4602.4	5264.9	4682.9
32.5°	4856.4	4874.3	4793.7	4656.1	4405.4	4114.4	4123.3	4287.8	4600.1	5398.1	4721.0
35°	5202.3	5222.4	5181.0	5064.6	4785.9	4395.3	4268.8	4396.4	4672.9	5601.8	4822.8
37.5°	5588.4	5619.7	5630.9	5520.1	5222.4	4765.8	4507.2	4602.4	4837.4	5885.0	5009.8
40°	6144.7	6188.3	6185.0	6026.0	5722.7	5266.1	4875.4	4900.1	5093.7	6263.3	5308.6
42.5°	7210.2	7219.2	6940.5	6594.6	6273.4	5792.1	5309.7	5289.6	5447.4	6742.4	5748.5
45°	8565.6	8528.7	7908.6	7240.4	6848.7	6396.5	5874.9	5776.4	5896.2	7326.6	6299.1
47.5°	9690.5	9605.4	8821.9	7899.7	7457.6	7053.5	6538.7	6366.3	6432.3	7989.2	7011.0
50°	10081.1	10017.3	9368.1	8448.1	8034.0	7854.9	7355.7	7111.7	7129.6	8779.4	7844.8
52.5°	9997.1	9988.2	9555.0	8809.6	8573.4	8696.6	8513.0	8182.8	8008.2	9656.9	8744.7
55°	9799.0	9818.0	9661.4	9230.4	9190.2	9509.1	10025.1	9781.1	9238.3	10542.2	9674.8
57.5°	9110.7	9159.9	9504.7	9759.8	10182.9	10657.5	11242.9	11173.5	10562.3	11499.2	10780.6
60°	7340.0	7454.2	8378.7	9656.9	11204.8	12688.9	12950.8	12789.7	11927.8	12686.7	12241.2
62.5°	5142.9	5261.6	6360.7	8360.8	11036.9	14983.4	16004.1	15309.1	13888.8	14436.1	14131.6
65°	2753.4	2810.4	3649.9	5801.1	9317.7	15456.8	20466.6	19408.9	16993.6	16592.9	15748.9
67.5°	1518.8	1550.2	1871.4	2929.1	5967.8	13611.2	23309.5	24108.6	20874.0	18028.9	15454.6
69°	1373.3	1402.4	1612.8	2218.4	3993.5	11254.0	23031.9	25347.6	22575.2	17886.7	14366.7
70°	1343.1	1370.0	1559.1	2044.9	3232.4	9276.3	22101.8	25030.9	22980.4	17377.5	13417.6
72.5°	1208.8	1237.9	1421.4	1836.7	2762.3	4624.7	17507.3	21163.9	20863.9	15067.3	10177.3
75°	1127.1	1153.9	1465.1	1798.6	2644.8	2926.8	11541.7	15597.8	15337.1	10540.0	5487.7
77.5°	482.4	480.2	679.4	1522.2	2684.0	2833.9	6201.8	9744.2	8890.2	4505.0	1575.9
80°	322.3	316.7	322.3	447.7	2461.2	2849.6	3249.2	4946.0	3736.1	1148.3	776.8
82.5°	277.6	273.1	283.2	273.1	865.2	3252.5	2762.3	2630.2	1776.2	652.5	385.0
85°	186.9	179.1	244.0	245.1	408.5	2889.9	3111.5	2221.7	1437.1	387.3	190.3
87.5°	89.5	87.3	142.1	173.5	239.5	1174.1	3490.9	2276.6	1449.4	198.1	90.7
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°	5904.0	5904.0	5904.0	5904.0	5904.0	5904.0	5904.0	5904.0	5904.0	5904.0	5904.0
2.5°	5847.0	5801.1	5756.3	5702.6	5646.6	5583.9	5552.6	5521.3	5513.4	5504.5	5473.1
5°	5685.8	5620.9	5508.9	5385.8	5256.0	5129.5	5033.3	4972.8	4926.9	4903.4	4862.0
7.5°	5477.6	5382.5	5186.6	4973.9	4755.7	4556.5	4384.1	4275.5	4172.6	4124.4	4069.6
10°	5279.5	5137.4	4832.9	4519.5	4206.1	3905.1	3621.9	3421.5	3243.6	3144.0	3073.5
12.5°	5109.4	4914.6	4492.7	4068.5	3638.7	3210.0	2785.8	2452.3	2173.6	2027.0	1952.0
15°	4943.7	4708.7	4169.2	3630.8	3079.1	2495.9	1938.5	1560.2	1329.7	1237.9	1206.5
17.5°	4793.7	4492.7	3844.6	3189.9	2501.5	1796.4	1302.8	1094.6	1006.2	976.0	965.9
20°	4631.5	4274.4	3507.7	2728.7	1899.4	1255.8	1017.4	925.6	889.8	880.8	876.4
22.5°	4474.8	4059.5	3185.4	2235.1	1364.4	969.3	874.1	836.1	830.5	838.3	838.3
25°	4341.6	3867.0	2837.3	1719.2	1001.7	815.9	782.4	773.4	794.7	823.8	829.4
27.5°	4242.0	3709.2	2466.8	1269.2	798.0	709.6	708.5	723.0	775.6	831.6	842.8
30°	4173.7	3559.2	2070.6	915.5	669.3	624.5	642.4	673.8	751.0	830.5	851.7
32.5°	4139.0	3448.4	1657.6	708.5	573.1	548.4	578.7	616.7	692.8	766.7	794.7
35°	4165.8	3366.7	1268.1	591.0	505.9	486.9	518.2	555.1	599.9	631.3	652.5
37.5°	4266.6	3334.2	957.0	529.4	460.0	442.1	466.7	488.0	505.9	514.9	524.9
40°	4483.7	3368.9	766.7	498.1	434.3	411.9	422.0	429.8	441.0	449.9	454.4
42.5°	4803.8	3473.0	687.2	485.8	420.8	388.4	386.1	389.5	404.0	420.8	424.2
45°	5251.5	3656.6	681.6	493.6	414.1	369.4	359.3	363.8	386.1	411.9	416.4
47.5°	5823.5	3936.4	726.4	517.1	419.7	359.3	342.5	348.1	376.1	410.8	416.4
50°	6516.3	4327.0	801.4	551.8	444.3	361.5	336.9	340.3	369.4	407.4	413.0
52.5°	7334.4	4881.0	883.1	585.4	470.1	376.1	341.4	333.5	360.4	394.0	400.7
55°	8244.4	5591.8	967.0	615.6	483.5	394.0	350.3	324.6	343.6	371.6	377.2
57.5°	9361.4	6585.7	1112.5	644.7	492.5	406.3	359.3	315.6	322.3	342.5	347.0
60°	10873.5	7991.4	1368.8	692.8	512.6	410.8	358.2	307.8	301.1	312.3	314.5
62.5°	12685.6	9518.1	1582.6	753.3	546.2	414.1	351.4	302.2	283.2	283.2	285.4
65°	13761.2	9926.6	1464.0	803.6	574.2	410.8	343.6	296.6	269.7	257.4	258.5
67.5°	12849.0	8730.1	1254.7	813.7	573.1	395.1	331.3	286.5	256.3	237.3	236.2
69°	11706.2	7532.5	1160.7	786.8	546.2	374.9	315.6	275.3	246.2	226.1	225.0
70°	10785.1	6801.7	1099.1	757.7	517.1	360.4	303.3	265.3	238.4	219.4	217.1
72.5°	7841.5	4456.8	939.0	651.4	426.4	302.2	261.9	232.8	212.7	201.5	199.2
75°	3918.5	2125.5	762.2	528.3	326.8	241.8	214.9	194.7	184.7	182.4	181.3
77.5°	1287.1	973.7	545.1	394.0	242.9	189.2	173.5	158.9	156.7	163.4	161.2
80°	707.4	566.3	345.8	260.8	165.6	138.8	136.5	128.7	132.1	143.3	141.0
82.5°	360.4	294.4	213.8	156.7	111.9	99.6	108.6	104.1	108.6	118.6	117.5
85°	178.0	161.2	135.4	95.1	73.9	63.8	77.2	80.6	82.8	90.7	90.7
87.5°	103.0	95.1	71.6	44.8	36.9	33.6	44.8	43.7	51.5	56.0	54.8
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)