

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: P299968

Luminaire Tested: **GLNA-AF-06-LED-E1-SL3-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299968
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-06-LED-E1-SL3-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 4000K 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: 23373.9 lumens
Efficiency: N/A
Efficacy: 121.1 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

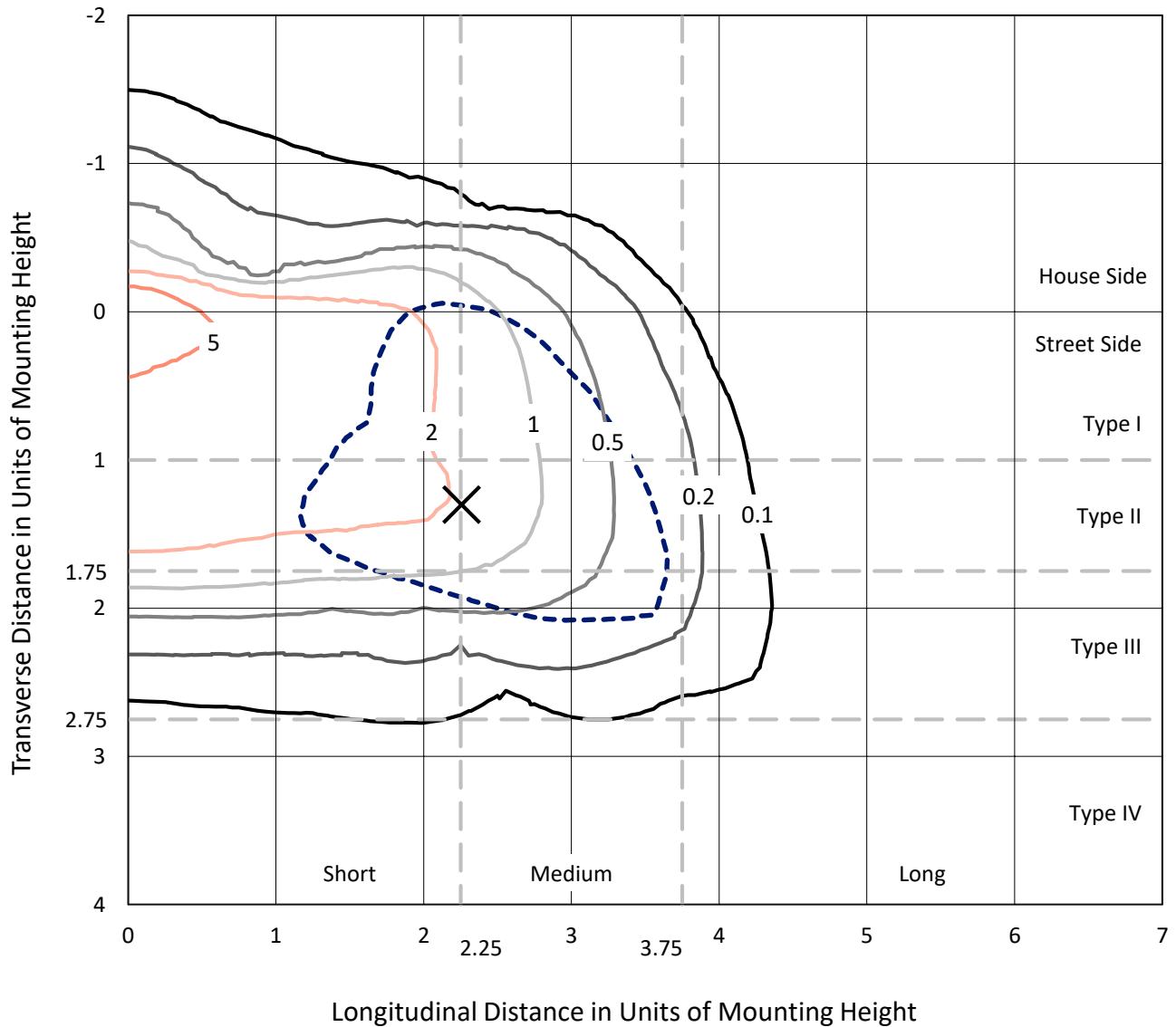
Input Watts (W): 193
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

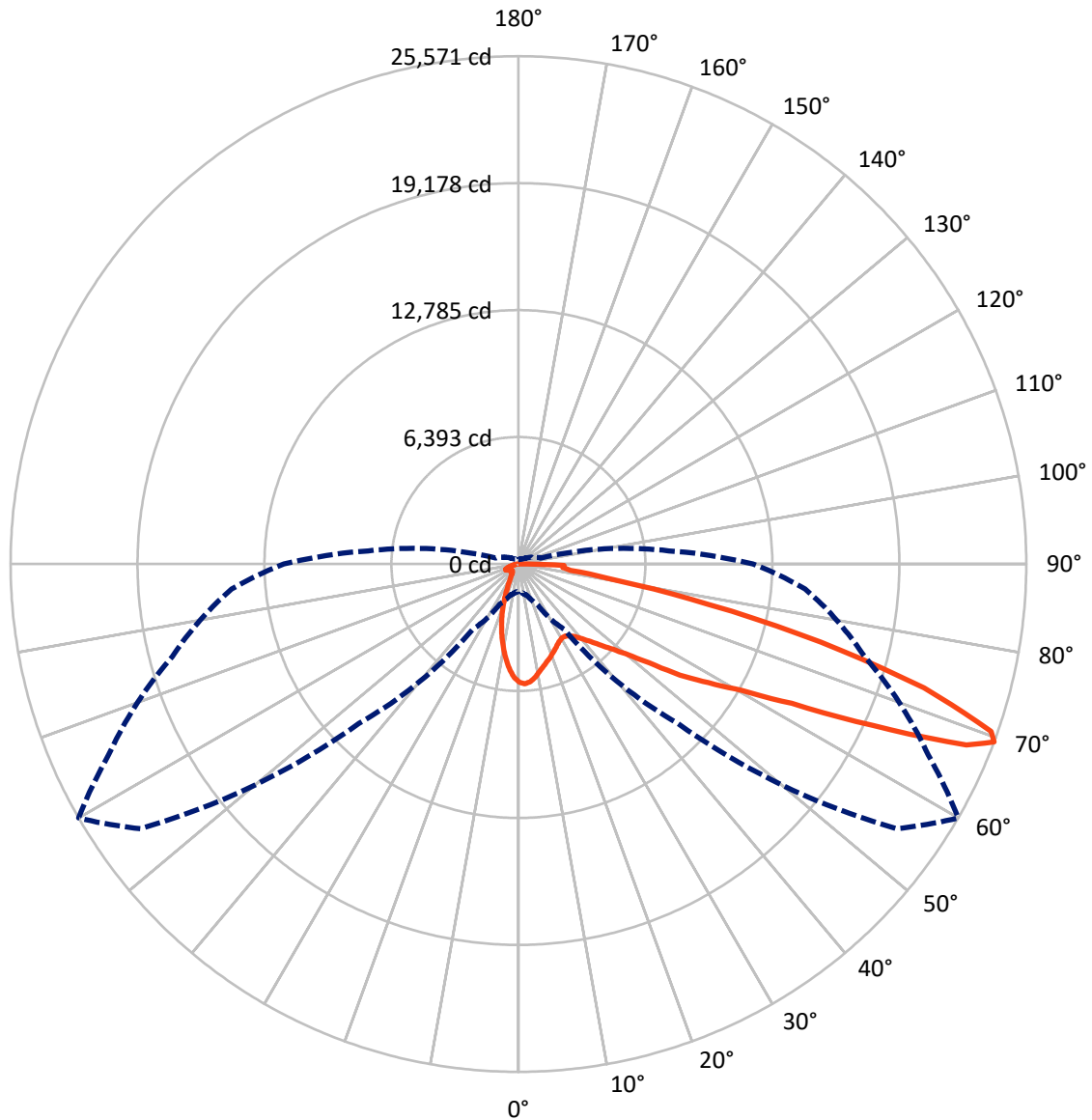
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 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	3325.4	0.0	3325.4
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	20048.5	0.0	20048.5
	% Fixture	85.8	0.0	85.8
Total	Lumens	23373.9	0.0	23373.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	503.6	2.2
10°-20°	1073.0	4.6
20°-30°	1367.1	5.8
30°-40°	1879.5	8.0
40°-50°	3049.6	13.0
50°-60°	4890.8	20.9
60°-70°	6509.3	27.8
70°-80°	3514.5	15.0
80°-90°	586.4	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°	23373.9	100.0
0°-180°	23373.9	100.0



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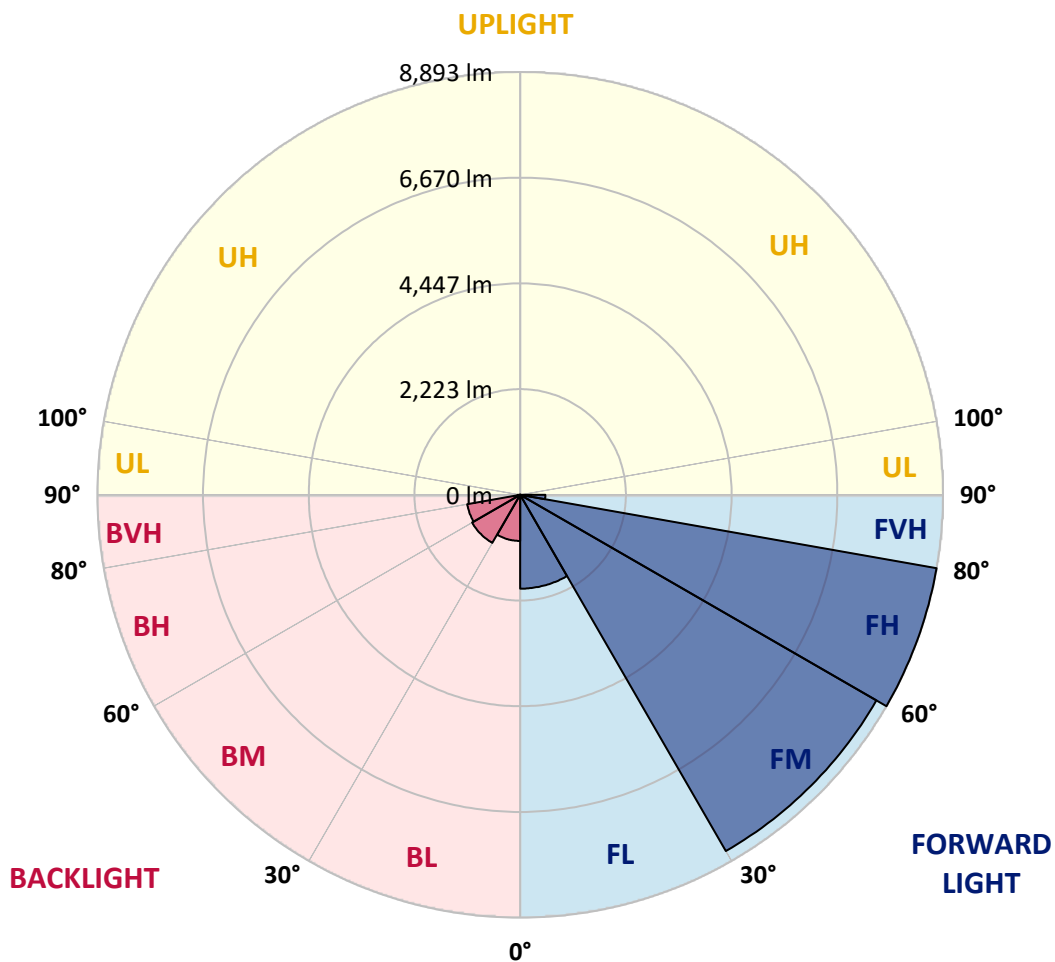
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1973.6	8.4			
FM	(30°-60°)	8651.7	37.0			
FH	(60°-80°)	8893.3	38.0			G4/12000
FVH	(80°-90°)	530.0	2.3			G4/750
BL	(0°-30°)	970.1	4.2	B2/1000		
BM	(30°-60°)	1168.3	5.0	B2/2500		
BH	(60°-80°)	1130.5	4.8	B3/2500		G3/2500
BVH	(80°-90°)	56.5	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°	5956.0	5956.0	5956.0	5956.0	5956.0	5956.0	5956.0	5956.0	5956.0	5956.0	5956.0
2.5°	6078.0	6091.5	6085.9	6082.5	6092.6	6076.8	6044.1	6033.9	6018.1	5980.9	5917.6
5°	5849.9	5890.5	5888.3	5918.8	5969.6	5983.1	5968.4	5970.7	5941.3	5895.1	5790.0
7.5°	5455.8	5472.8	5481.8	5548.4	5641.0	5715.5	5778.8	5799.1	5785.5	5746.0	5610.5
10°	5049.4	5062.9	5084.4	5162.3	5279.7	5382.4	5502.1	5571.0	5600.4	5593.6	5442.3
12.5°	4700.5	4714.0	4742.2	4830.3	4970.3	5096.8	5270.7	5356.5	5426.5	5468.3	5305.7
15°	4387.7	4417.1	4444.2	4545.8	4702.7	4868.7	5065.2	5173.6	5282.0	5375.7	5184.8
17.5°	4143.8	4173.2	4189.0	4281.6	4448.7	4651.9	4882.2	5009.8	5145.3	5298.9	5065.2
20°	4002.7	4016.2	4009.5	4061.4	4211.6	4427.2	4700.5	4848.4	5012.1	5226.6	4945.5
22.5°	3963.2	3964.3	3939.4	3933.8	4030.9	4212.7	4506.3	4685.8	4886.8	5179.2	4842.7
25°	4059.1	4055.7	3988.0	3932.7	3942.8	4049.0	4318.8	4527.7	4781.8	5169.0	4763.7
27.5°	4272.5	4282.7	4182.2	4078.3	3975.6	3972.2	4176.6	4396.7	4695.9	5215.3	4729.8
30°	4571.7	4588.7	4481.4	4349.3	4156.2	3997.0	4121.2	4318.8	4642.9	5311.3	4724.2
32.5°	4899.2	4917.3	4836.0	4697.1	4444.2	4150.6	4159.6	4325.6	4640.6	5445.7	4762.6
35°	5248.1	5268.4	5226.6	5109.2	4828.1	4434.0	4306.4	4435.1	4714.0	5651.2	4865.3
37.5°	5637.6	5669.2	5680.5	5568.7	5268.4	4807.7	4546.9	4642.9	4880.0	5936.8	5053.9
40°	6198.8	6242.8	6239.4	6079.1	5773.1	5312.4	4918.4	4943.2	5138.6	6318.5	5355.3
42.5°	7273.7	7282.7	7001.6	6652.7	6328.6	5843.1	5356.5	5336.1	5495.4	6801.7	5799.1
45°	8641.0	8603.8	7978.3	7304.2	6909.0	6452.8	5926.7	5827.3	5948.1	7391.1	6354.6
47.5°	9775.8	9690.0	8899.6	7969.2	7523.2	7115.6	6596.2	6422.3	6489.0	8059.5	7072.7
50°	10169.8	10105.5	9450.6	8522.5	8104.7	7924.1	7420.5	7174.3	7192.4	8856.7	7913.9
52.5°	10085.2	10076.1	9639.2	8887.2	8648.9	8773.1	8588.0	8254.9	8078.7	9741.9	8821.7
55°	9885.3	9904.5	9746.4	9311.7	9271.1	9592.9	10113.4	9867.2	9319.6	10635.0	9760.0
57.5°	9190.9	9240.6	9588.4	9845.8	10272.6	10751.3	11341.9	11271.9	10655.4	11600.4	10875.5
60°	7404.7	7519.8	8452.5	9741.9	11303.5	12800.7	13064.9	12902.3	12032.9	12798.4	12349.0
62.5°	5188.2	5307.9	6416.7	8434.4	11134.1	15115.3	16145.1	15443.9	14011.1	14563.2	14256.1
65°	2777.6	2835.2	3682.0	5852.1	9399.8	15592.9	20646.8	19579.8	17143.2	16739.0	15887.6
67.5°	1532.2	1563.8	1887.9	2954.9	6020.4	13731.0	23514.7	24320.9	21057.8	18187.6	15590.7
69°	1385.4	1414.8	1627.0	2237.9	4028.6	11353.1	23234.7	25570.8	22774.0	18044.2	14493.2
70°	1354.9	1382.0	1572.8	2062.9	3260.9	9358.0	22296.4	25251.3	23182.8	17530.5	13535.7
72.5°	1219.4	1248.8	1434.0	1852.9	2786.6	4665.5	17661.5	21350.2	21047.6	15200.0	10266.9
75°	1137.0	1164.1	1478.0	1814.5	2668.1	2952.6	11643.3	15735.2	15472.1	10632.8	5536.0
77.5°	486.6	484.4	685.4	1535.6	2707.6	2858.9	6256.4	9830.0	8968.5	4544.6	1589.8
80°	325.2	319.5	325.2	451.6	2482.9	2874.7	3277.8	4989.5	3769.0	1158.5	783.6
82.5°	280.0	275.5	285.7	275.5	872.8	3281.2	2786.6	2653.4	1791.9	658.3	388.4
85°	188.6	180.7	246.1	247.3	412.1	2915.3	3138.9	2241.3	1449.8	390.7	191.9
87.5°	90.3	88.1	143.4	175.0	241.6	1184.4	3521.7	2296.6	1462.2	199.9	91.5
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°	5956.0	5956.0	5956.0	5956.0	5956.0	5956.0	5956.0	5956.0	5956.0	5956.0	5956.0
2.5°	5898.4	5852.1	5807.0	5752.8	5696.3	5633.1	5601.5	5569.9	5562.0	5552.9	5521.3
5°	5735.9	5670.4	5557.5	5433.3	5302.3	5174.7	5077.6	5016.6	4970.3	4946.6	4904.8
7.5°	5525.8	5429.9	5232.3	5017.7	4797.6	4596.6	4422.7	4313.2	4209.3	4160.8	4105.4
10°	5326.0	5182.6	4875.5	4559.3	4243.2	3939.4	3653.8	3451.7	3272.1	3171.7	3100.5
12.5°	5154.4	4957.9	4532.2	4104.3	3670.7	3238.3	2810.3	2473.9	2192.7	2044.8	1969.2
15°	4987.3	4750.1	4205.9	3662.8	3106.2	2517.9	1955.6	1574.0	1341.4	1248.8	1217.2
17.5°	4836.0	4532.2	3878.5	3217.9	2523.5	1812.2	1314.3	1104.3	1015.1	984.6	974.4
20°	4672.2	4312.1	3538.6	2752.8	1916.1	1266.9	1026.4	933.8	897.6	888.6	884.1
22.5°	4514.2	4095.3	3213.4	2254.8	1376.4	977.8	881.8	843.4	837.8	845.7	845.7
25°	4379.8	3901.1	2862.3	1734.3	1010.5	823.1	789.2	780.2	801.7	831.0	836.7
27.5°	4279.3	3741.9	2488.5	1280.4	805.1	715.9	714.7	729.4	782.5	838.9	850.2
30°	4210.4	3590.6	2088.8	923.6	675.2	630.0	648.1	679.7	757.6	837.8	859.2
32.5°	4175.4	3478.8	1672.2	714.7	578.1	553.3	583.7	622.1	698.9	773.4	801.7
35°	4202.5	3396.3	1279.3	596.2	510.4	491.2	522.8	560.0	605.2	636.8	658.3
37.5°	4304.1	3363.6	965.4	534.1	464.1	446.0	470.8	492.3	510.4	519.4	529.6
40°	4523.2	3398.6	773.4	502.5	438.1	415.5	425.7	433.6	444.9	453.9	458.4
42.5°	4846.1	3503.6	693.3	490.0	424.5	391.8	389.5	392.9	407.6	424.5	427.9
45°	5297.8	3688.8	687.6	497.9	417.8	372.6	362.4	367.0	389.5	415.5	420.0
47.5°	5874.7	3971.1	732.8	521.6	423.4	362.4	345.5	351.2	379.4	414.4	420.0
50°	6573.6	4365.1	808.4	556.6	448.3	364.7	339.9	343.2	372.6	411.0	416.6
52.5°	7399.0	4924.0	890.9	590.5	474.2	379.4	344.4	336.5	363.6	397.4	404.2
55°	8317.0	5641.0	975.5	621.0	487.8	397.4	353.4	327.4	346.6	374.9	380.5
57.5°	9443.8	6643.7	1122.3	650.4	496.8	409.9	362.4	318.4	325.2	345.5	350.0
60°	10969.3	8061.8	1380.9	698.9	517.1	414.4	361.3	310.5	303.7	315.0	317.3
62.5°	12797.3	9601.9	1596.6	759.9	551.0	417.8	354.5	304.9	285.7	285.7	287.9
65°	13882.3	10014.0	1476.9	810.7	579.2	414.4	346.6	299.2	272.1	259.7	260.8
67.5°	12962.1	8807.0	1265.7	820.9	578.1	398.6	334.2	289.1	258.6	239.4	238.2
69°	11809.3	7598.9	1170.9	793.8	551.0	378.3	318.4	277.8	248.4	228.1	227.0
70°	10880.1	6861.6	1108.8	764.4	521.6	363.6	306.0	267.6	240.5	221.3	219.0
72.5°	7910.5	4496.1	947.3	657.1	430.2	304.9	264.2	234.9	214.5	203.2	201.0
75°	3953.0	2144.2	768.9	532.9	329.7	243.9	216.8	196.5	186.3	184.0	182.9
77.5°	1298.5	982.3	549.9	397.4	245.0	190.8	175.0	160.3	158.1	164.8	162.6
80°	713.6	571.3	348.9	263.1	167.1	140.0	137.8	129.8	133.2	144.5	142.3
82.5°	363.6	297.0	215.7	158.1	112.9	100.5	109.5	105.0	109.5	119.7	118.6
85°	179.5	162.6	136.6	96.0	74.5	64.4	77.9	81.3	83.6	91.5	91.5
87.5°	103.9	96.0	72.3	45.2	37.3	33.9	45.2	44.0	51.9	56.5	55.3
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)