

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: P299995

Luminaire Tested: **GLNA-AF-10-LED-E1-SL3-7050-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299995  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)  
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-SL3-7050-800-HSS  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36937.8 lumens  
Efficiency: N/A  
Efficacy: 88.2 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B3 - 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

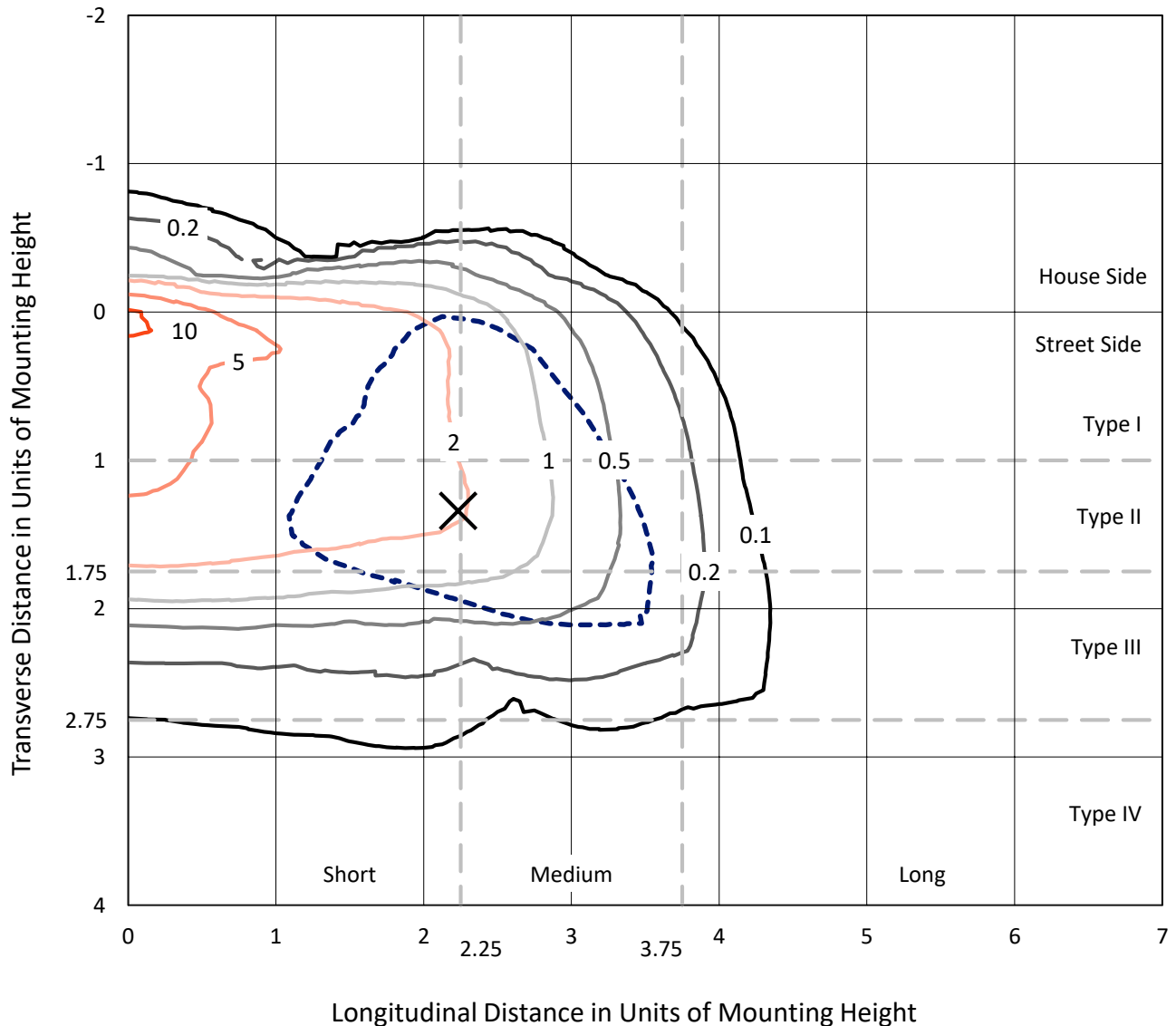


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

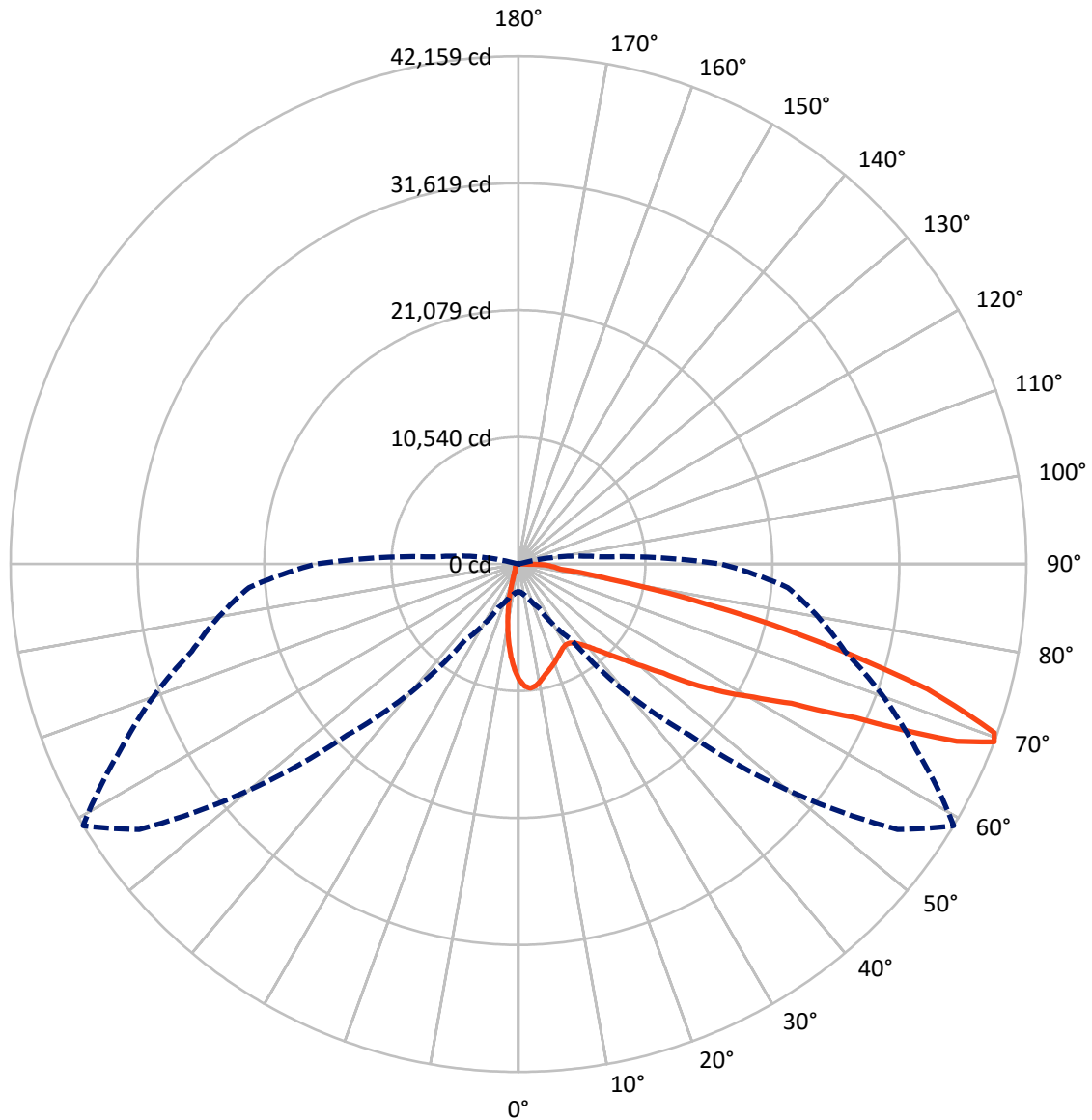


Based on 30 foot mounting height. Maximum calculated value = 10.7 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3008.0	0.0	3008.0
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	33929.7	0.0	33929.7
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	36937.8	0.0	36937.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	780.4	2.1
10°-20°	1612.5	4.4
20°-30°	2169.9	5.9
30°-40°	3150.5	8.5
40°-50°	5245.8	14.2
50°-60°	8183.4	22.2
60°-70°	10126.4	27.4
70°-80°	5131.9	13.9
80°-90°	537.0	1.5
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°	36937.8	100.0
0°-180°	36937.8	100.0



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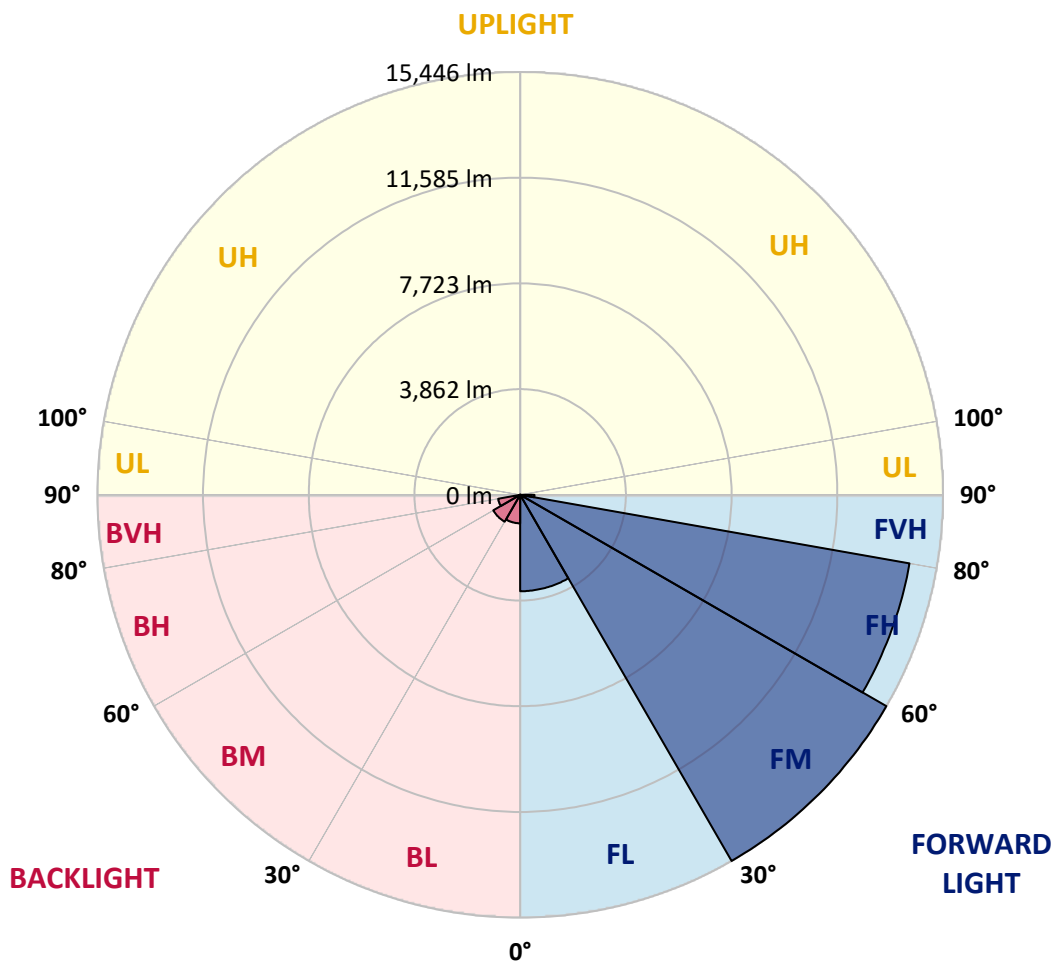
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3521.6	9.5			
FM	(30°-60°)	15446.3	41.8			
FH	(60°-80°)	14441.4	39.1			G5
FVH	(80°-90°)	520.5	1.4			G4/750
BL	(0°-30°)	1041.2	2.8	B3/2500		
BM	(30°-60°)	1133.4	3.1	B2/2500		
BH	(60°-80°)	816.9	2.2	B2/1000		G2/1000
BVH	(80°-90°)	16.5	0.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	9614.2	9614.2	9614.2	9614.2	9614.2	9614.2	9614.2	9614.2	9614.2	9614.2	9614.2
2.5°	10537.5	10533.7	10487.5	10466.7	10428.7	10349.7	10226.4	10161.8	10057.5	9875.4	9631.3
5°	10441.4	10492.0	10518.5	10521.0	10548.2	10518.5	10407.8	10354.1	10209.9	9917.1	9478.9
7.5°	9790.0	9808.3	9886.1	9952.5	10082.2	10205.5	10245.3	10221.9	10136.6	9823.5	9240.5
10°	9092.5	9110.8	9203.1	9290.4	9466.2	9655.9	9856.4	9898.8	9934.2	9689.5	9010.9
12.5°	8490.4	8509.4	8603.6	8718.1	8923.0	9157.0	9468.1	9537.0	9693.9	9562.3	8826.9
15°	7972.5	7980.7	8073.1	8214.7	8459.5	8759.8	9113.3	9224.0	9464.3	9472.5	8666.2
17.5°	7531.7	7552.6	7609.5	7744.9	8012.4	8384.2	8795.9	8954.6	9236.0	9397.3	8509.4
20°	7262.3	7283.2	7281.3	7356.6	7596.9	7993.4	8478.4	8668.1	9010.9	9320.1	8369.7
22.5°	7210.5	7210.5	7156.1	7145.4	7287.6	7619.6	8148.3	8379.8	8807.9	9286.6	8271.6
25°	7396.4	7387.6	7252.2	7141.6	7147.9	7345.8	7828.3	8104.1	8637.2	9309.4	8219.2
27.5°	7789.1	7778.4	7607.0	7396.4	7226.9	7225.0	7586.1	7882.7	8501.2	9418.2	8240.0
30°	8331.7	8327.9	8142.0	7876.4	7569.7	7287.6	7502.7	7772.1	8413.3	9614.2	8288.1
32.5°	8924.9	8918.6	8778.8	8499.3	8110.4	7569.7	7590.6	7816.3	8438.6	9875.4	8405.1
35°	9554.1	9543.4	9482.7	9238.6	8810.4	8089.5	7878.9	8054.1	8597.3	10266.2	8634.6
37.5°	10234.6	10245.3	10289.0	10055.0	9606.0	8818.7	8361.4	8480.3	8916.7	10796.8	9008.4
40°	11239.4	11237.5	11252.1	10944.7	10512.8	9710.3	9035.6	9073.5	9451.7	11500.6	9576.9
42.5°	13062.6	12935.5	12549.1	11922.4	11488.0	10729.7	9886.1	9846.3	10105.6	12371.4	10372.4
45°	15513.1	15241.2	14238.9	13038.0	12482.1	11878.8	10932.1	10805.0	10970.0	13418.0	11354.5
47.5°	17620.2	17338.2	15920.4	14199.0	13536.9	12969.0	12158.3	11928.7	11983.1	14589.8	12599.1
50°	18336.7	18198.9	16960.7	15210.2	14558.2	14341.3	13581.2	13301.0	13223.9	15945.0	14042.2
52.5°	18088.2	18078.1	17252.8	15866.0	15494.1	15761.6	15370.8	15047.0	14763.1	17374.2	15510.6
55°	17689.2	17741.7	17371.7	16440.2	16427.6	17058.7	17818.8	17549.4	16726.7	18926.1	16776.6
57.5°	16588.8	16812.0	17305.3	17526.6	18040.1	18685.8	19857.6	20016.4	19043.1	20114.4	17827.0
60°	13459.8	13950.5	15563.1	17682.8	20118.8	21727.0	22318.2	22453.6	20943.4	21102.2	19245.5
62.5°	9554.1	10055.0	12100.1	15686.4	20149.8	25722.4	25983.6	25451.1	23036.6	22566.8	21691.6
65°	5071.1	5458.1	7128.9	11322.9	17470.4	26650.1	32394.1	30806.8	26729.2	25446.7	24851.6
67.5°	2594.1	2711.0	3375.7	5541.6	12010.3	23671.6	38140.0	39257.4	33093.5	28304.4	24699.2
69°	2295.6	2364.5	2805.3	4006.2	7690.5	20049.9	38420.1	42158.8	36425.6	28066.0	22445.4
70°	2222.2	2282.9	2683.9	3626.1	6011.5	16813.9	37348.2	41903.9	37277.4	27159.8	20761.9
72.5°	1886.4	1938.3	2389.8	3204.3	4885.8	8346.3	30338.8	35508.6	33450.8	22625.0	15028.1
75°	1261.6	1433.0	2293.7	3003.8	4545.0	4741.6	20001.8	25659.8	23836.6	15260.2	7828.3
77.5°	302.9	325.7	647.6	2389.8	4156.7	4173.1	10287.1	15951.4	13010.8	5439.2	1850.4
80°	163.2	156.8	181.5	474.3	3870.2	3916.4	4631.0	7743.0	4645.5	902.4	609.6
82.5°	115.1	108.8	117.0	198.6	1218.0	3567.3	3350.4	3504.7	1925.6	346.5	273.8
85°	41.7	39.8	64.5	179.6	382.0	2050.8	3442.1	2890.6	1560.1	158.7	200.5
87.5°	14.5	12.6	25.3	98.0	117.0	873.3	2124.2	2184.9	614.0	96.1	94.2
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°	9614.2	9614.2	9614.2	9614.2	9614.2	9614.2	9614.2	9614.2	9614.2	9614.2	9614.2
2.5°	9528.8	9399.2	9161.4	8916.7	8690.9	8419.6	8283.7	8150.2	8093.9	8073.1	7975.0
5°	9253.1	9033.7	8528.4	8020.6	7552.6	7055.6	6728.0	6464.9	6310.0	6234.7	6115.8
7.5°	8900.2	8541.0	7773.9	6991.1	6261.9	5543.5	5011.0	4601.3	4319.2	4183.9	4060.6
10°	8557.5	8079.4	6989.2	5921.7	4931.4	3979.0	3243.5	2711.0	2370.8	2214.0	2114.1
12.5°	8250.8	7630.4	6230.9	4879.5	3636.2	2521.3	1773.2	1349.5	1138.3	1064.9	1029.5
15°	7976.9	7216.8	5514.4	3889.2	2462.5	1441.2	969.5	825.3	791.8	791.8	787.3
17.5°	7717.7	6811.5	4822.6	2959.6	1545.6	881.5	737.4	718.4	718.4	726.6	726.6
20°	7469.1	6425.1	4154.2	2124.2	973.2	699.4	666.5	662.1	666.5	676.7	676.7
22.5°	7256.0	6074.1	3530.0	1457.7	722.8	630.5	614.0	607.7	609.6	615.9	620.4
25°	7097.3	5777.5	2941.2	987.8	622.3	574.2	555.9	545.1	536.9	536.9	540.7
27.5°	6997.4	5527.1	2370.8	718.4	559.7	522.4	492.6	476.2	457.2	447.1	450.9
30°	6924.0	5288.7	1835.8	586.9	501.5	463.5	426.2	399.0	371.8	359.2	363.6
32.5°	6896.8	5096.4	1372.3	517.9	449.0	407.3	361.1	325.7	296.6	285.8	288.4
35°	6970.2	4944.0	1004.9	468.0	407.3	354.8	302.9	263.1	240.3	234.0	235.9
37.5°	7162.4	4862.4	751.9	426.2	369.9	311.1	253.0	215.0	200.5	200.5	202.4
40°	7525.4	4860.5	603.9	397.1	336.4	269.4	208.7	181.5	173.3	177.7	179.6
42.5°	8056.0	4971.2	526.1	369.9	307.3	229.6	173.3	154.3	152.4	156.8	158.7
45°	8780.7	5173.6	484.4	346.5	275.7	192.2	146.1	133.4	133.4	139.8	142.3
47.5°	9668.6	5470.2	449.0	323.8	244.1	160.6	125.2	117.0	118.9	125.2	127.1
50°	10738.0	5844.5	413.6	298.5	221.3	133.4	108.8	102.4	104.3	112.6	115.1
52.5°	11955.9	6347.9	384.5	275.7	192.2	110.7	91.7	87.9	91.7	100.5	102.4
55°	13000.0	6798.8	349.1	256.7	154.3	91.7	75.3	75.3	79.7	89.8	91.7
57.5°	14004.9	7270.6	317.5	221.3	121.4	73.4	62.6	64.5	70.8	81.6	83.5
60°	15479.6	8070.5	280.1	185.9	91.7	58.2	52.5	54.4	62.6	73.4	75.3
62.5°	17983.9	9288.5	242.2	154.3	70.8	46.2	41.7	46.2	56.3	68.9	70.8
65°	20244.0	9783.7	198.6	129.6	54.4	35.4	35.4	41.7	54.4	67.0	68.9
67.5°	18984.3	8235.6	154.3	102.4	41.7	27.2	29.1	39.8	52.5	67.0	68.9
69°	16789.3	6734.3	131.5	81.6	35.4	25.3	27.2	39.8	52.5	64.5	67.0
70°	15078.7	5685.8	117.0	68.9	31.6	25.3	27.2	37.3	52.5	64.5	67.0
72.5°	10099.2	3070.2	94.2	50.0	29.1	22.8	22.8	37.3	50.0	62.6	64.5
75°	4340.1	848.0	75.3	35.4	25.3	20.9	20.9	35.4	48.1	60.7	64.5
77.5°	793.6	215.0	60.7	31.6	25.3	20.9	19.0	33.5	46.2	58.2	60.7
80°	315.6	106.2	48.1	27.2	22.8	19.0	16.4	31.6	43.6	56.3	58.2
82.5°	190.3	60.7	39.8	25.3	22.8	16.4	14.5	27.2	41.7	54.4	56.3
85°	154.3	41.7	31.6	25.3	20.9	16.4	12.6	25.3	37.3	52.5	54.4
87.5°	75.3	29.1	29.1	22.8	20.9	16.4	12.6	22.8	35.4	50.0	52.5
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)