

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: P191162

Luminaire Tested: **GLEON-AF-04-LED-E1-SL3-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191162  
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: GLEON-AF-04-LED-E1-SL3-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19846.3 lumens  
Efficiency: N/A  
Efficacy: 116.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G4

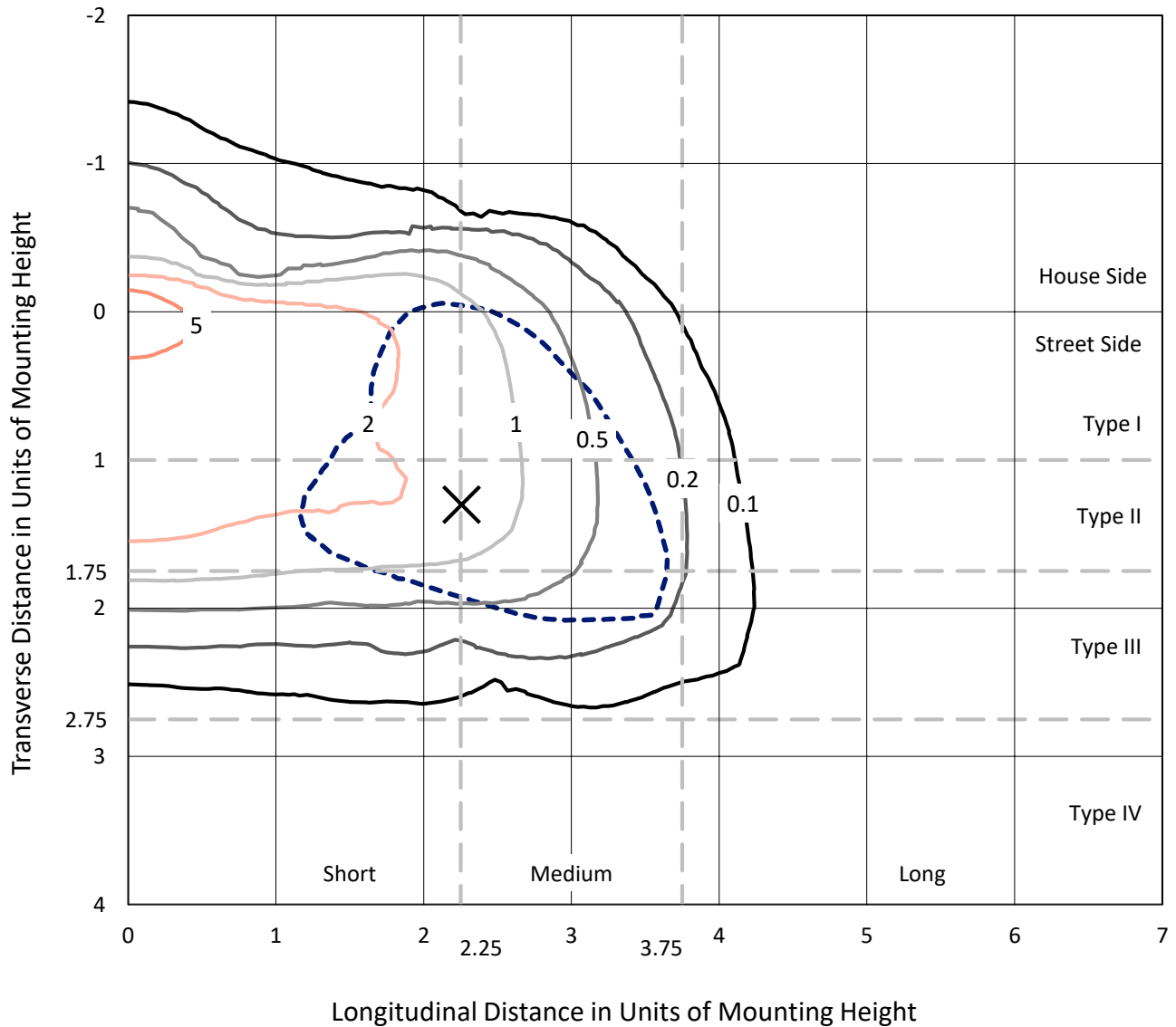
Input Watts (W): 171  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

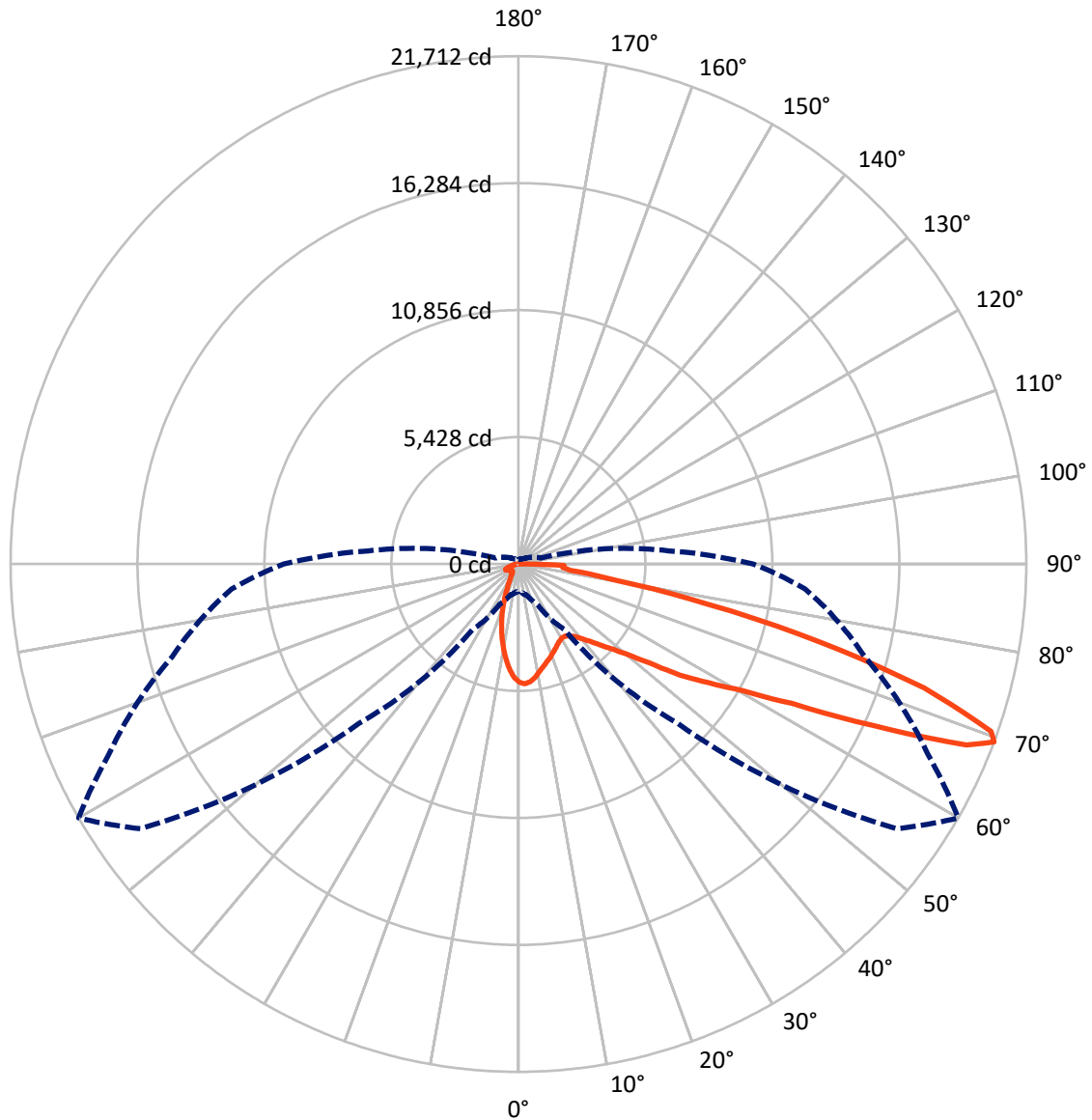
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 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
<b>House Side</b>	Lumens	2823.5	0.0	2823.5
	% Fixture	14.2	0.0	14.2
<b>Street Side</b>	Lumens	17022.8	0.0	17022.8
	% Fixture	85.8	0.0	85.8
<b>Total</b>	Lumens	19846.3	0.0	19846.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	427.6	2.2
10°-20°	911.0	4.6
20°-30°	1160.8	5.8
30°-40°	1595.8	8.0
40°-50°	2589.4	13.0
50°-60°	4152.7	20.9
60°-70°	5526.9	27.8
70°-80°	2984.1	15.0
80°-90°	497.9	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°	19846.3	100.0
0°-180°	19846.3	100.0

**Coefficient of Utilization**



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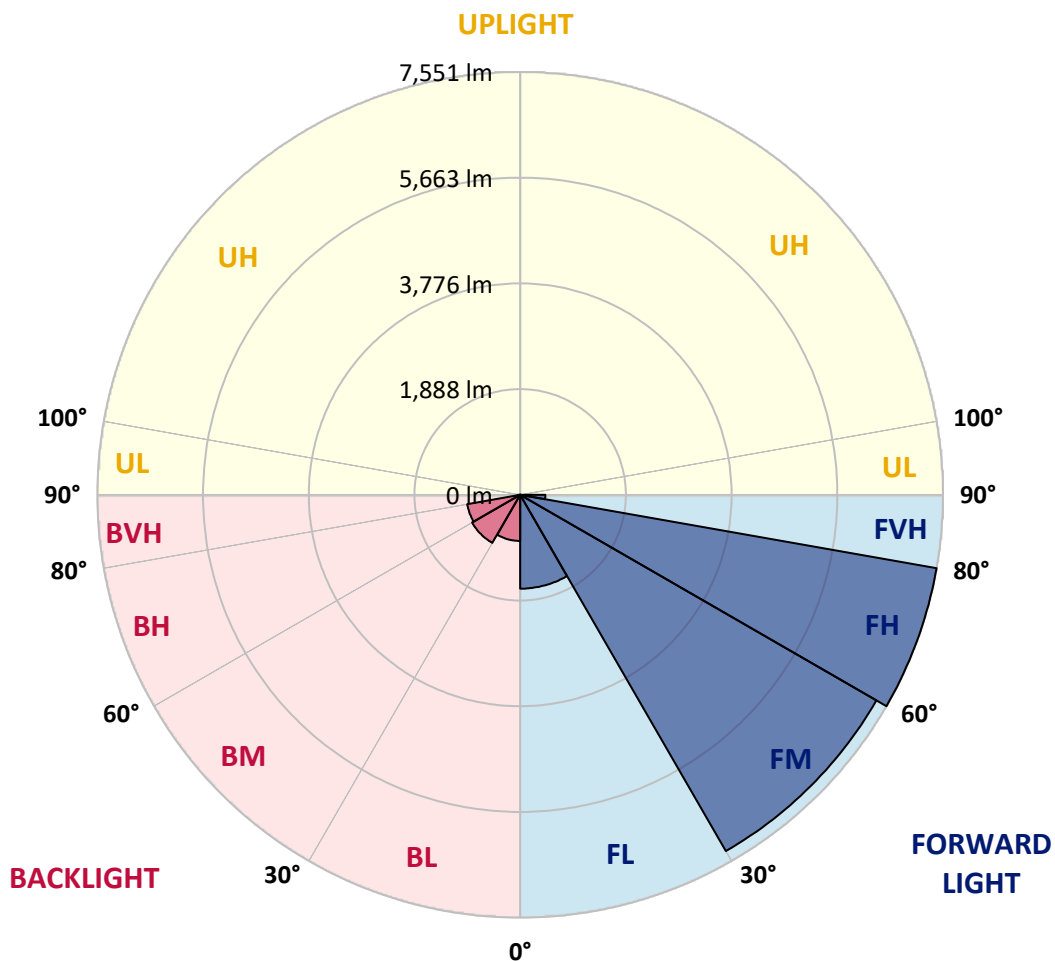
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1675.7	8.4			
FM	(30°-60°)	7345.9	37.0			
FH	(60°-80°)	7551.1	38.0			G4/12000
FVH	(80°-90°)	450.0	2.3			G3/500
BL	(0°-30°)	823.7	4.2	B2/1000		
BM	(30°-60°)	991.9	5.0	B1/1000		
BH	(60°-80°)	959.9	4.8	B2/1000		G2/1000
BVH	(80°-90°)	48.0	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	5057.2	5057.2	5057.2	5057.2	5057.2	5057.2	5057.2	5057.2	5057.2	5057.2	5057.2
2.5°	5160.7	5172.1	5167.3	5164.5	5173.2	5159.7	5131.9	5123.2	5109.8	5078.2	5024.5
5°	4967.0	5001.5	4999.6	5025.5	5068.6	5080.2	5067.7	5069.6	5044.7	5005.4	4916.2
7.5°	4632.4	4646.9	4654.5	4711.0	4789.7	4852.9	4906.6	4923.9	4912.4	4878.9	4763.8
10°	4287.3	4298.8	4317.1	4383.1	4482.9	4570.1	4671.7	4730.2	4755.2	4749.4	4620.9
12.5°	3991.0	4002.6	4026.5	4101.3	4220.2	4327.6	4475.2	4548.0	4607.5	4643.0	4504.9
15°	3725.5	3750.4	3773.5	3859.7	3993.0	4133.9	4300.7	4392.8	4484.8	4564.4	4402.4
17.5°	3518.4	3543.3	3556.8	3635.4	3777.2	3949.8	4145.4	4253.7	4368.8	4499.1	4300.7
20°	3398.5	3410.1	3404.4	3448.5	3575.9	3759.0	3991.0	4116.7	4255.7	4437.8	4199.1
22.5°	3365.0	3366.0	3344.9	3340.1	3422.6	3577.0	3826.1	3978.6	4149.3	4397.6	4111.9
25°	3446.5	3443.7	3386.1	3339.1	3347.8	3437.9	3667.0	3844.4	4060.1	4388.9	4044.7
27.5°	3627.7	3636.4	3551.0	3462.8	3375.5	3372.7	3546.3	3733.2	3987.3	4428.3	4016.0
30°	3881.8	3896.1	3805.1	3693.0	3529.0	3393.7	3499.2	3667.0	3942.1	4509.7	4011.2
32.5°	4159.8	4175.2	4106.1	3988.2	3773.5	3524.2	3531.8	3672.8	3940.2	4623.8	4043.8
35°	4456.1	4473.3	4437.8	4338.1	4099.4	3764.8	3656.4	3765.8	4002.6	4798.3	4131.0
37.5°	4786.8	4813.6	4823.2	4728.3	4473.3	4082.1	3860.7	3942.1	4143.5	5040.8	4291.2
40°	5263.3	5300.6	5297.8	5161.6	4901.8	4510.7	4176.1	4197.2	4363.0	5364.9	4547.1
42.5°	6176.0	6183.6	5944.9	5648.6	5373.5	4961.3	4548.0	4530.9	4666.0	5775.2	4923.9
45°	7336.9	7305.3	6774.2	6201.8	5866.3	5478.9	5032.2	4947.8	5050.4	6275.6	5395.6
47.5°	8300.4	8227.6	7556.4	6766.5	6387.8	6041.8	5600.8	5453.0	5509.6	6843.2	6005.2
50°	8635.0	8580.3	8024.3	7236.3	6881.5	6728.2	6300.6	6091.6	6106.9	7520.0	6719.6
52.5°	8563.1	8555.4	8184.4	7545.9	7343.7	7449.1	7291.9	7009.1	6859.5	8271.7	7490.4
55°	8393.4	8409.7	8275.5	7906.4	7871.9	8145.1	8587.1	8378.1	7913.1	9030.0	8287.0
57.5°	7803.8	7846.0	8141.3	8359.9	8722.2	9128.7	9630.2	9570.7	9047.2	9849.7	9234.2
60°	6287.2	6385.0	7176.8	8271.7	9597.5	10868.8	11093.1	10955.1	10216.8	10866.8	10485.2
62.5°	4405.2	4506.8	5448.2	7161.5	9453.7	12834.0	13708.5	13113.1	11896.5	12365.3	12104.5
65°	2358.4	2407.3	3126.3	4968.9	7981.2	13239.6	17530.7	16624.8	14555.9	14212.7	13489.9
67.5°	1301.0	1327.8	1603.0	2508.9	5111.8	11658.7	19965.9	20650.3	17879.7	15442.7	13237.7
69°	1176.3	1201.3	1381.5	1900.1	3420.6	9639.7	19728.1	21711.6	19336.9	15320.9	12305.9
70°	1150.4	1173.4	1335.5	1751.5	2768.7	7945.7	18931.4	21440.3	19684.0	14884.8	11492.9
72.5°	1035.4	1060.3	1217.5	1573.2	2366.1	3961.4	14995.9	18128.0	17871.1	12906.0	8717.5
75°	965.4	988.4	1255.0	1540.7	2265.4	2506.9	9886.1	13360.5	13137.0	9028.1	4700.5
77.5°	413.2	411.3	582.0	1303.9	2299.0	2427.5	5312.2	8346.5	7614.9	3858.8	1349.9
80°	276.1	271.3	276.1	383.5	2108.2	2440.9	2783.1	4236.4	3200.1	983.7	665.3
82.5°	237.7	233.9	242.5	233.9	741.0	2786.0	2366.1	2252.9	1521.4	558.9	329.8
85°	160.1	153.4	209.0	209.9	350.0	2475.3	2665.2	1903.0	1231.0	331.7	163.0
87.5°	76.7	74.8	121.7	148.6	205.2	1005.7	2990.2	1949.9	1241.6	169.7	77.6
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°	5057.2	5057.2	5057.2	5057.2	5057.2	5057.2	5057.2	5057.2	5057.2	5057.2	5057.2
2.5°	5008.3	4968.9	4930.6	4884.6	4836.6	4782.9	4756.1	4729.3	4722.6	4714.9	4688.1
5°	4870.2	4814.6	4718.7	4613.3	4502.0	4393.7	4311.2	4259.5	4220.2	4200.0	4164.5
7.5°	4691.9	4610.3	4442.6	4260.5	4073.5	3902.9	3755.3	3662.3	3574.0	3532.8	3485.8
10°	4522.2	4400.4	4139.7	3871.3	3602.8	3344.9	3102.3	2930.8	2778.3	2693.0	2632.6
12.5°	4376.5	4209.6	3848.2	3484.9	3116.7	2749.6	2386.2	2100.5	1861.8	1736.2	1672.0
15°	4234.6	4033.3	3571.1	3110.0	2637.4	2137.9	1660.5	1336.4	1139.0	1060.3	1033.5
17.5°	4106.1	3848.2	3293.1	2732.3	2142.7	1538.7	1115.9	937.6	861.8	836.0	827.4
20°	3967.1	3661.2	3004.5	2337.3	1626.9	1075.6	871.5	792.9	762.2	754.5	750.6
22.5°	3832.9	3477.2	2728.4	1914.6	1168.6	830.2	748.7	716.2	711.4	718.1	718.1
25°	3718.8	3312.3	2430.3	1472.5	858.1	698.9	670.1	662.5	680.7	705.6	710.4
27.5°	3633.4	3177.1	2113.0	1087.2	683.5	607.8	606.8	619.3	664.4	712.3	721.9
30°	3575.0	3048.7	1773.6	784.2	573.3	535.0	550.2	577.1	643.3	711.4	729.6
32.5°	3545.2	2953.8	1419.9	606.8	490.8	469.7	495.6	528.3	593.4	656.7	680.7
35°	3568.3	2883.8	1086.2	506.2	433.3	417.1	443.9	475.5	513.8	540.7	558.9
37.5°	3654.6	2856.0	819.7	453.5	394.0	378.7	399.8	418.0	433.3	441.0	449.6
40°	3840.6	2885.6	656.7	426.6	371.9	352.8	361.4	368.2	377.8	385.3	389.2
42.5°	4114.7	2974.8	588.6	416.0	360.5	332.7	330.7	333.6	346.1	360.5	363.4
45°	4498.2	3132.1	583.8	422.8	354.8	316.4	307.7	311.6	330.7	352.8	356.6
47.5°	4988.1	3371.7	622.2	442.9	359.5	307.7	293.4	298.2	322.1	351.8	356.6
50°	5581.5	3706.4	686.4	472.6	380.6	309.6	288.6	291.4	316.4	348.9	353.7
52.5°	6282.4	4180.9	756.4	501.3	402.6	322.1	292.4	285.7	308.7	337.5	343.2
55°	7061.7	4789.7	828.3	527.3	414.2	337.5	300.0	278.0	294.3	318.2	323.0
57.5°	8018.5	5641.0	953.0	552.2	421.9	348.0	307.7	270.4	276.1	293.4	297.2
60°	9313.8	6845.1	1172.5	593.4	439.1	351.8	306.8	263.6	257.9	267.5	269.3
62.5°	10865.9	8152.8	1355.6	645.2	467.8	354.8	301.1	258.8	242.5	242.5	244.5
65°	11787.2	8502.7	1253.9	688.3	491.8	351.8	294.3	254.1	231.1	220.5	221.5
67.5°	11005.8	7477.9	1074.7	696.9	490.8	338.4	283.8	245.4	219.5	203.3	202.2
69°	10027.1	6452.1	994.2	673.9	467.8	321.2	270.4	235.8	210.9	193.6	192.7
70°	9238.0	5826.0	941.4	649.1	442.9	308.7	259.8	227.2	204.2	187.9	186.0
72.5°	6716.6	3817.6	804.3	557.9	365.3	258.8	224.3	199.4	182.2	172.6	170.6
75°	3356.4	1820.5	652.8	452.6	280.0	207.0	184.0	166.8	158.1	156.3	155.3
77.5°	1102.5	834.1	466.9	337.5	208.1	162.0	148.6	136.2	134.2	139.9	138.1
80°	605.9	485.1	296.2	223.4	141.9	118.9	116.9	110.3	113.1	122.8	120.8
82.5°	308.7	252.2	183.1	134.2	95.9	85.3	93.0	89.2	93.0	101.6	100.7
85°	152.4	138.1	116.0	81.5	63.3	54.6	66.2	69.0	71.0	77.6	77.6
87.5°	88.2	81.5	61.4	38.4	31.6	28.7	38.4	37.4	44.1	48.0	47.0
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)