

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: P299828

Luminaire Tested: **GLNA-AF-03-LED-E1-SL3-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299828  
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-03-LED-E1-SL3-7030  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Square Medium OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17518.3 lumens  
Efficiency: N/A  
Efficacy: 105.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G3

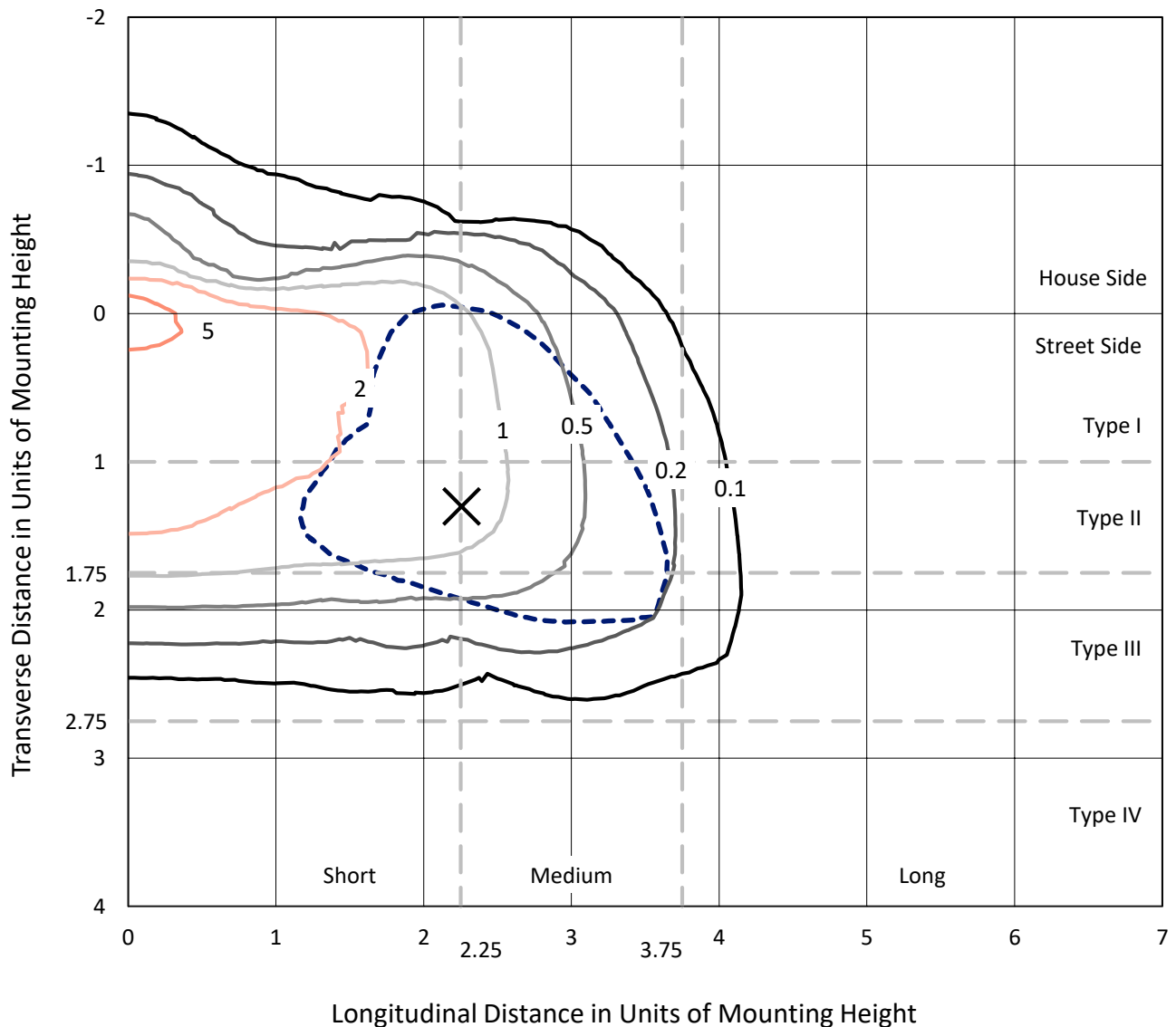
Input Watts (W): 166  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

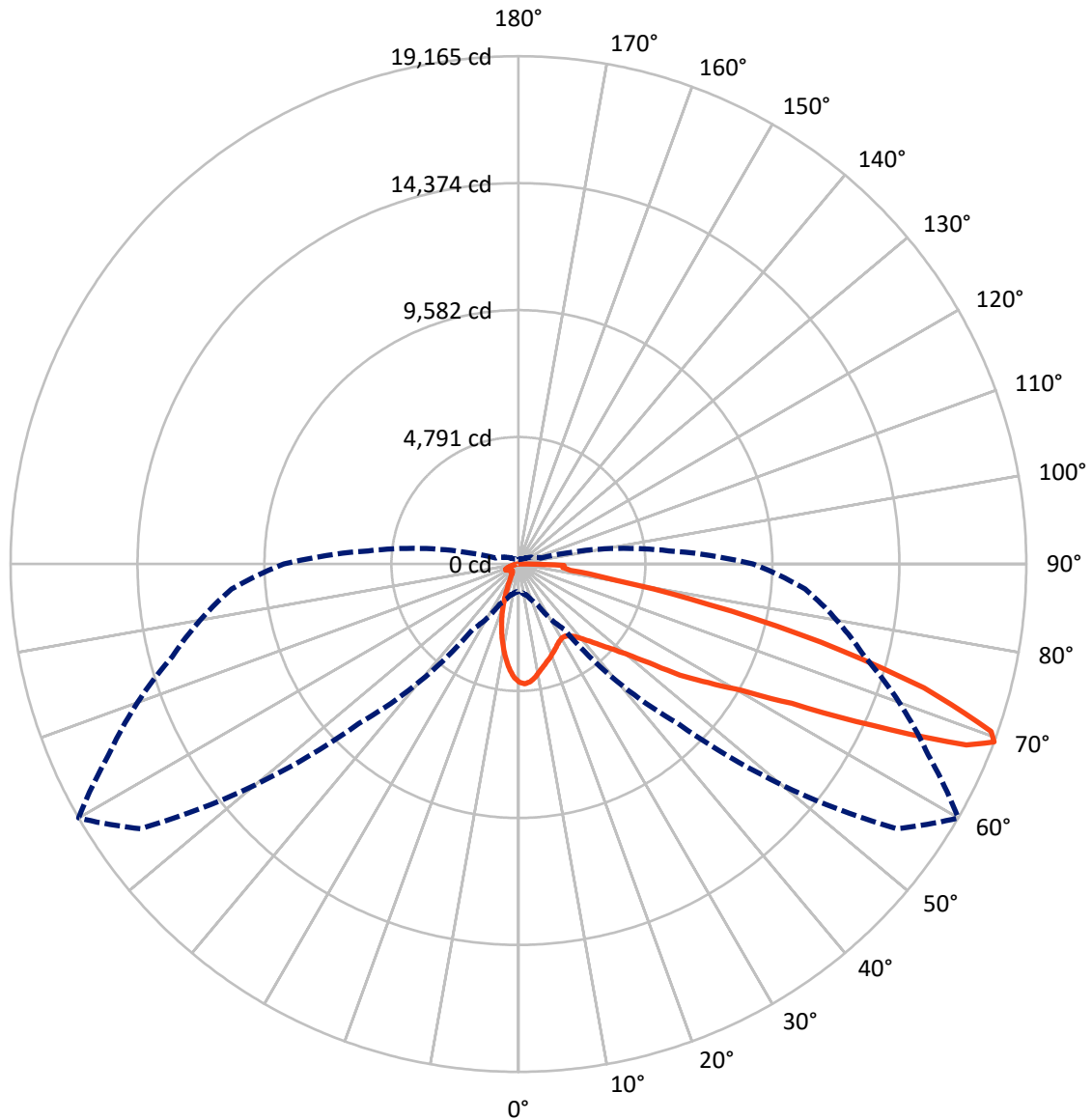
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 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	2492.3	0.0	2492.3
	% Fixture	14.2	0.0	14.2
<b>Street Side</b>	Lumens	15026.0	0.0	15026.0
	% Fixture	85.8	0.0	85.8
<b>Total</b>	Lumens	17518.3	0.0	17518.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	377.4	2.2
10°-20°	804.2	4.6
20°-30°	1024.6	5.8
30°-40°	1408.6	8.0
40°-50°	2285.6	13.0
50°-60°	3665.6	20.9
60°-70°	4878.6	27.8
70°-80°	2634.1	15.0
80°-90°	439.5	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°	17518.3	100.0
0°-180°	17518.3	100.0

**Coefficient of Utilization**



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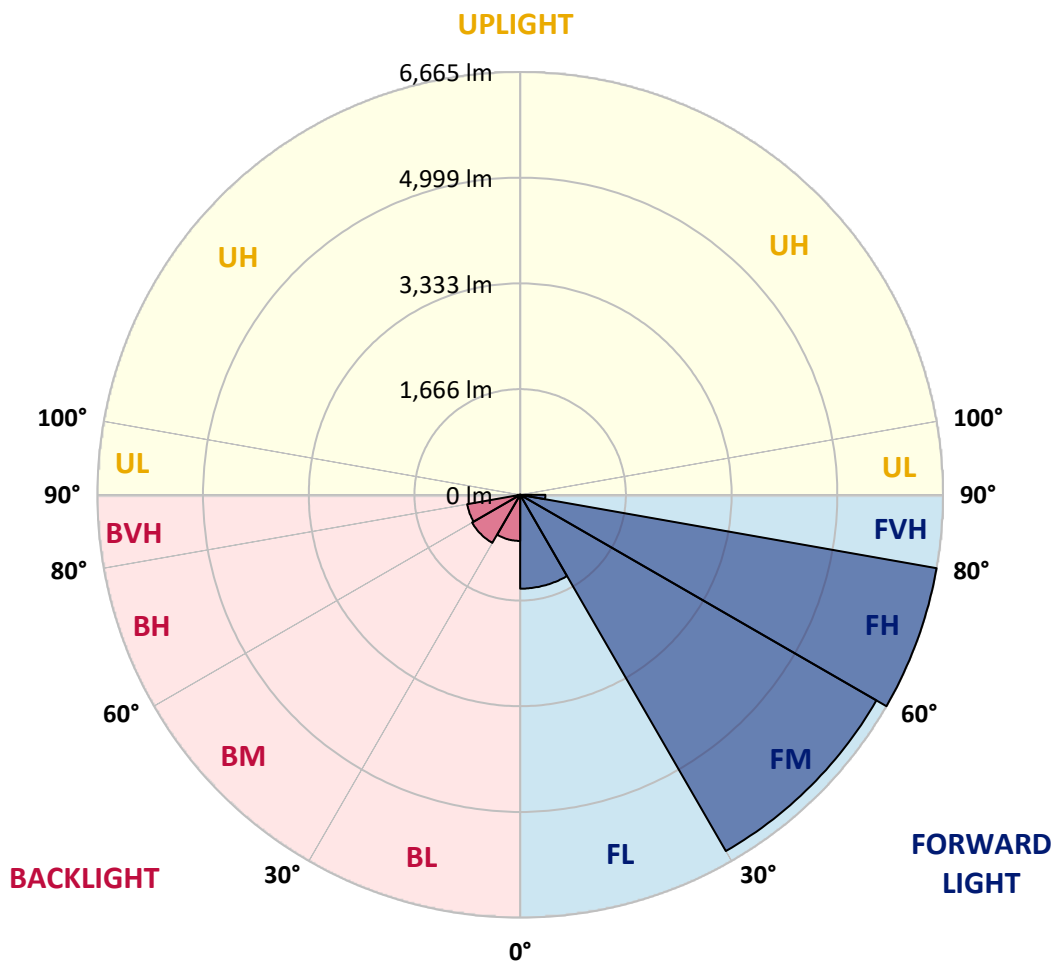
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1479.2	8.4			
FM	(30°-60°)	6484.3	37.0			
FH	(60°-80°)	6665.4	38.0			G3/7500
FVH	(80°-90°)	397.2	2.3			G3/500
BL	(0°-30°)	727.1	4.2	B2/1000		
BM	(30°-60°)	875.6	5.0	B1/1000		
BH	(60°-80°)	847.3	4.8	B2/1000		G2/1000
BVH	(80°-90°)	42.3	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-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	4463.9	4463.9	4463.9	4463.9	4463.9	4463.9	4463.9	4463.9	4463.9	4463.9	4463.9
2.5°	4555.3	4565.5	4561.3	4558.7	4566.3	4554.5	4529.9	4522.3	4510.5	4482.5	4435.2
5°	4384.4	4414.8	4413.2	4436.0	4474.1	4484.2	4473.2	4474.9	4452.9	4418.2	4339.5
7.5°	4089.0	4101.7	4108.5	4158.4	4227.8	4283.7	4331.1	4346.3	4336.1	4306.5	4205.0
10°	3784.4	3794.6	3810.6	3869.0	3957.0	4034.0	4123.7	4175.4	4197.4	4192.3	4078.9
12.5°	3522.9	3533.1	3554.2	3620.2	3725.2	3819.9	3950.3	4014.6	4067.0	4098.4	3976.5
15°	3288.5	3310.5	3330.8	3407.0	3524.6	3649.0	3796.2	3877.5	3958.7	4029.0	3885.9
17.5°	3105.7	3127.7	3139.6	3209.0	3334.2	3486.5	3659.2	3754.8	3856.3	3971.4	3796.2
20°	2999.9	3010.1	3005.0	3043.9	3156.5	3318.1	3522.9	3633.8	3756.5	3917.3	3706.5
22.5°	2970.3	2971.2	2952.5	2948.3	3021.1	3157.3	3377.4	3511.9	3662.5	3881.7	3629.5
25°	3042.2	3039.7	2988.9	2947.5	2955.1	3034.6	3236.9	3393.4	3583.8	3874.1	3570.3
27.5°	3202.2	3209.8	3134.5	3056.6	2979.6	2977.1	3130.3	3295.3	3519.5	3908.8	3544.9
30°	3426.4	3439.1	3358.7	3259.7	3115.0	2995.7	3088.8	3236.9	3479.8	3980.7	3540.7
32.5°	3671.8	3685.4	3624.5	3520.4	3330.8	3110.8	3117.6	3242.0	3478.1	4081.4	3569.5
35°	3933.3	3948.6	3917.3	3829.2	3618.5	3323.2	3227.6	3324.0	3533.1	4235.4	3646.5
37.5°	4225.3	4249.0	4257.4	4173.7	3948.6	3603.3	3407.8	3479.8	3657.5	4449.5	3787.8
40°	4645.9	4678.9	4676.3	4556.2	4326.8	3981.6	3686.2	3704.9	3851.3	4735.6	4013.7
42.5°	5451.5	5458.3	5247.6	4986.1	4743.2	4379.3	4014.6	3999.3	4118.7	5097.8	4346.3
45°	6476.3	6448.4	5979.6	5474.3	5178.2	4836.3	4441.9	4367.5	4458.0	5539.5	4762.7
47.5°	7326.8	7262.5	6670.1	5972.8	5638.5	5333.0	4943.8	4813.4	4863.4	6040.5	5300.9
50°	7622.1	7573.9	7083.1	6387.4	6074.3	5938.9	5561.5	5377.0	5390.6	6637.9	5931.3
52.5°	7558.6	7551.9	7224.4	6660.8	6482.2	6575.3	6436.5	6186.9	6054.9	7301.4	6611.7
55°	7408.9	7423.2	7304.8	6979.0	6948.5	7189.7	7579.8	7395.3	6984.9	7970.8	7314.9
57.5°	6888.4	6925.7	7186.3	7379.2	7699.1	8057.9	8500.5	8448.0	7986.0	8694.3	8151.0
60°	5549.7	5636.0	6335.0	7301.4	8471.7	9593.9	9791.9	9670.0	9018.4	9592.2	9255.4
62.5°	3888.5	3978.2	4809.2	6321.4	8344.8	11328.7	12100.4	11574.9	10501.0	10914.8	10684.7
65°	2081.8	2124.9	2759.6	4386.1	7045.0	11686.6	15474.4	14674.7	12848.5	12545.6	11907.5
67.5°	1148.4	1172.0	1414.9	2214.6	4512.2	10291.2	17623.9	18228.1	15782.4	13631.3	11684.9
69°	1038.3	1060.3	1219.4	1677.3	3019.4	8509.0	17414.0	19164.9	17068.7	13523.8	10862.4
70°	1015.5	1035.8	1178.8	1546.1	2443.9	7013.7	16710.8	18925.4	17375.1	13138.8	10144.8
72.5°	913.9	935.9	1074.7	1388.7	2088.5	3496.7	13236.9	16001.6	15774.8	11392.1	7694.9
75°	852.2	872.5	1107.7	1359.9	1999.7	2212.9	8726.5	11793.2	11596.1	7969.1	4149.1
77.5°	364.7	363.0	513.7	1150.9	2029.3	2142.7	4689.0	7367.4	6721.7	3406.1	1191.5
80°	243.7	239.5	243.7	338.5	1860.9	2154.5	2456.6	3739.5	2824.8	868.2	587.3
82.5°	209.9	206.5	214.1	206.5	654.1	2459.2	2088.5	1988.7	1343.0	493.4	291.1
85°	141.3	135.4	184.5	185.3	308.9	2185.0	2352.6	1679.8	1086.6	292.8	143.9
87.5°	67.7	66.0	107.5	131.2	181.1	887.7	2639.4	1721.3	1095.9	149.8	68.5
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°	4463.9	4463.9	4463.9	4463.9	4463.9	4463.9	4463.9	4463.9	4463.9	4463.9	4463.9
2.5°	4420.8	4386.1	4352.2	4311.6	4269.3	4221.9	4198.2	4174.5	4168.6	4161.8	4138.1
5°	4298.9	4249.8	4165.2	4072.1	3974.0	3878.3	3805.6	3759.9	3725.2	3707.4	3676.1
7.5°	4141.5	4069.6	3921.5	3760.7	3595.7	3445.1	3314.7	3232.6	3154.8	3118.4	3076.9
10°	3991.7	3884.3	3654.1	3417.1	3180.2	2952.5	2738.4	2587.0	2452.4	2377.1	2323.8
12.5°	3863.1	3715.9	3396.8	3076.1	2751.1	2427.0	2106.3	1854.1	1643.4	1532.5	1475.8
15°	3737.9	3560.1	3152.3	2745.2	2328.0	1887.1	1465.7	1179.7	1005.3	935.9	912.3
17.5°	3624.5	3396.8	2906.8	2411.8	1891.4	1358.2	985.0	827.6	760.8	737.9	730.3
20°	3501.8	3231.8	2652.1	2063.1	1436.1	949.5	769.2	699.8	672.8	666.0	662.6
22.5°	3383.3	3069.3	2408.4	1689.9	1031.6	732.8	660.9	632.1	627.9	633.8	633.8
25°	3282.6	2923.8	2145.2	1299.8	757.4	616.9	591.5	584.8	600.8	622.8	627.1
27.5°	3207.3	2804.4	1865.1	959.6	603.4	536.5	535.7	546.7	586.4	628.8	637.2
30°	3155.6	2691.1	1565.5	692.2	506.1	472.2	485.7	509.4	567.8	627.9	644.0
32.5°	3129.4	2607.3	1253.3	535.7	433.3	414.7	437.5	466.3	523.8	579.7	600.8
35°	3149.7	2545.5	958.8	446.8	382.5	368.1	391.8	419.7	453.6	477.3	493.4
37.5°	3225.9	2521.0	723.5	400.3	347.8	334.3	352.9	369.0	382.5	389.3	396.9
40°	3390.0	2547.2	579.7	376.6	328.3	311.4	319.0	325.0	333.4	340.2	343.6
42.5°	3632.1	2625.9	519.6	367.3	318.2	293.6	292.0	294.5	305.5	318.2	320.7
45°	3970.6	2764.7	515.4	373.2	313.1	279.3	271.6	275.0	292.0	311.4	314.8
47.5°	4403.0	2976.2	549.2	391.0	317.3	271.6	259.0	263.2	284.3	310.6	314.8
50°	4926.8	3271.6	605.9	417.2	336.0	273.3	254.7	257.3	279.3	308.0	312.3
52.5°	5545.4	3690.5	667.7	442.6	355.4	284.3	258.1	252.2	272.5	297.9	303.0
55°	6233.4	4227.8	731.2	465.4	365.6	297.9	264.9	245.4	259.8	281.0	285.2
57.5°	7078.0	4979.3	841.2	487.4	372.3	307.2	271.6	238.6	243.7	259.0	262.3
60°	8221.3	6042.2	1035.0	523.8	387.6	310.6	270.8	232.7	227.6	236.1	237.8
62.5°	9591.3	7196.5	1196.6	569.5	413.0	313.1	265.7	228.5	214.1	214.1	215.8
65°	10404.6	7505.3	1106.9	607.6	434.1	310.6	259.8	224.3	203.9	194.6	195.5
67.5°	9714.9	6600.7	948.6	615.2	433.3	298.7	250.5	216.6	193.8	179.4	178.6
69°	8850.9	5695.2	877.6	594.9	413.0	283.5	238.6	208.2	186.2	170.9	170.1
70°	8154.4	5142.6	831.0	572.9	391.0	272.5	229.3	200.6	180.2	165.9	164.2
72.5°	5928.8	3369.7	710.0	492.5	322.4	228.5	198.0	176.0	160.8	152.3	150.6
75°	2962.7	1607.0	576.3	399.4	247.1	182.8	162.5	147.2	139.6	137.9	137.1
77.5°	973.2	736.2	412.1	297.9	183.6	143.0	131.2	120.2	118.5	123.6	121.9
80°	534.8	428.2	261.5	197.2	125.2	104.9	103.2	97.3	99.9	108.3	106.6
82.5°	272.5	222.6	161.6	118.5	84.6	75.3	82.1	78.7	82.1	89.7	88.9
85°	134.6	121.9	102.4	71.9	55.9	48.2	58.4	60.9	62.6	68.5	68.5
87.5°	77.9	71.9	54.2	33.8	27.9	25.4	33.8	33.0	38.9	42.3	41.5
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)