

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: P299180

Luminaire Tested: **GLNA-AF-05-LED-E1-SL2-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299180  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)  
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-SL2-7030-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Narrow OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22696.1 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G4

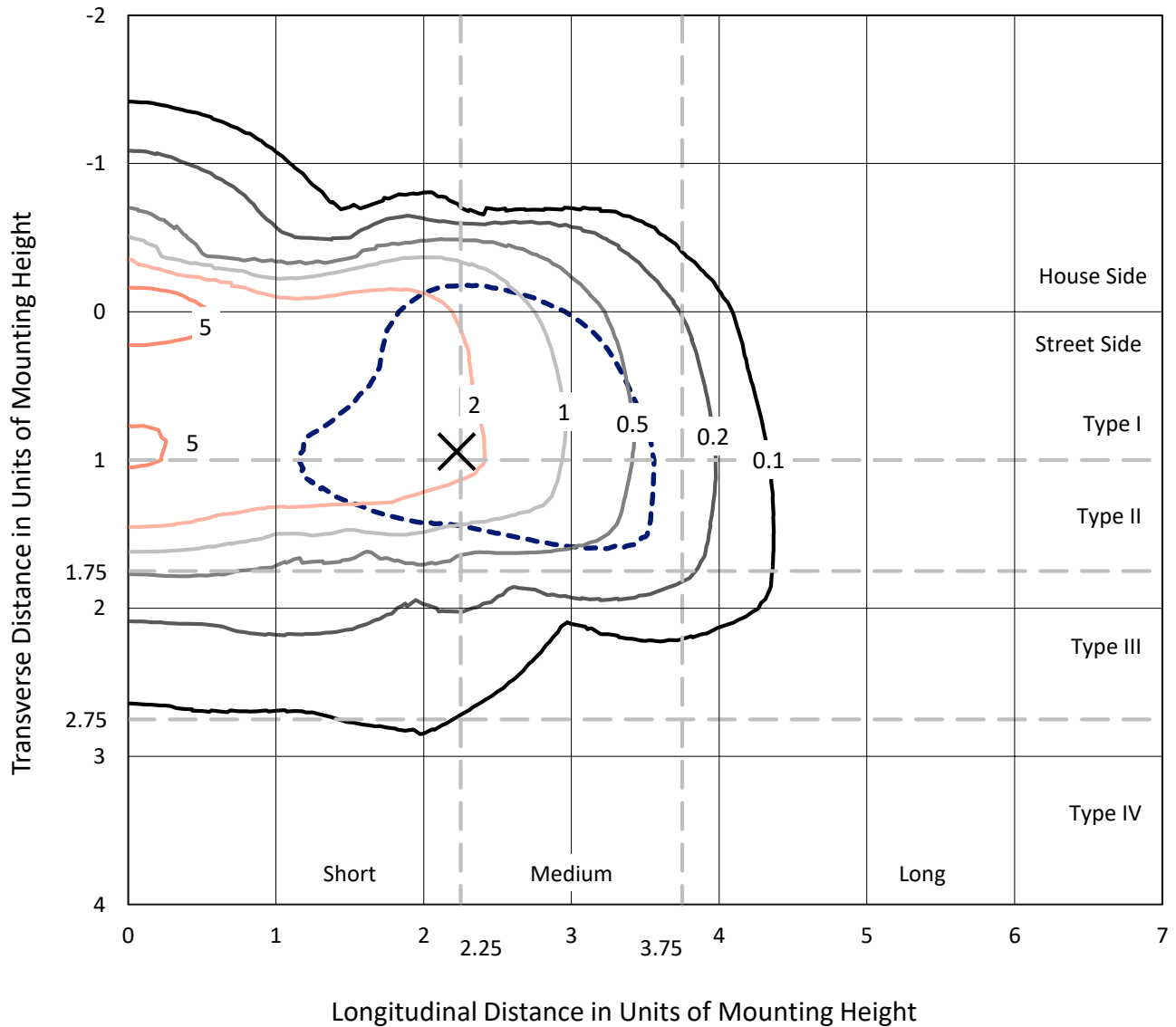
Input Watts (W): 210  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

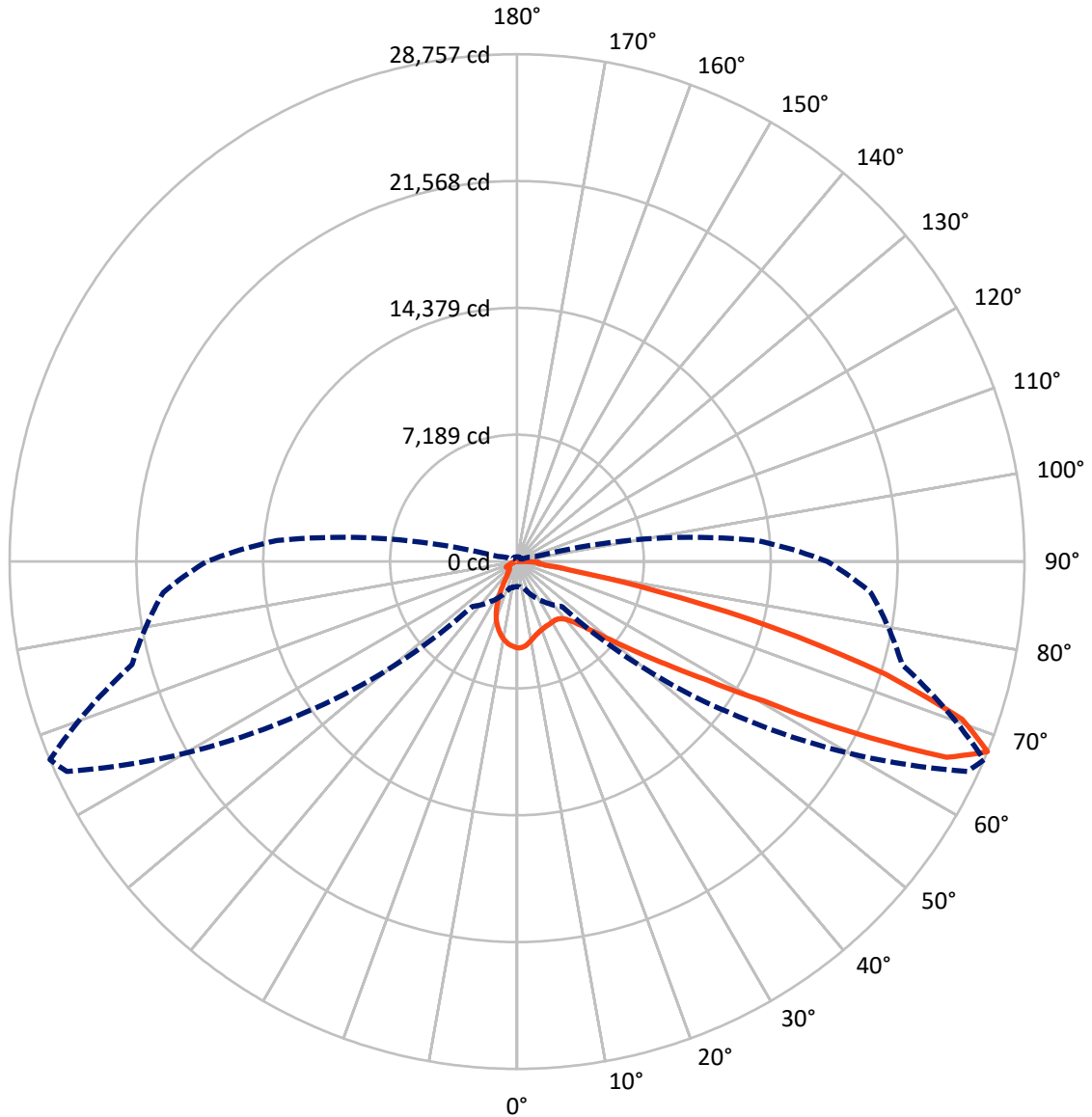
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3760.5	0.0	3760.5
	% Fixture	16.6	0.0	16.6
<b>Street Side</b>	Lumens	18935.6	0.0	18935.6
	% Fixture	83.4	0.0	83.4
<b>Total</b>	Lumens	22696.1	0.0	22696.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	417.7	1.8
10°-20°	966.4	4.3
20°-30°	1310.0	5.8
30°-40°	1862.3	8.2
40°-50°	3115.6	13.7
50°-60°	4928.9	21.7
60°-70°	6278.9	27.7
70°-80°	3288.9	14.5
80°-90°	527.5	2.3
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°	22696.1	100.0
0°-180°	22696.1	100.0

**Coefficient of Utilization**



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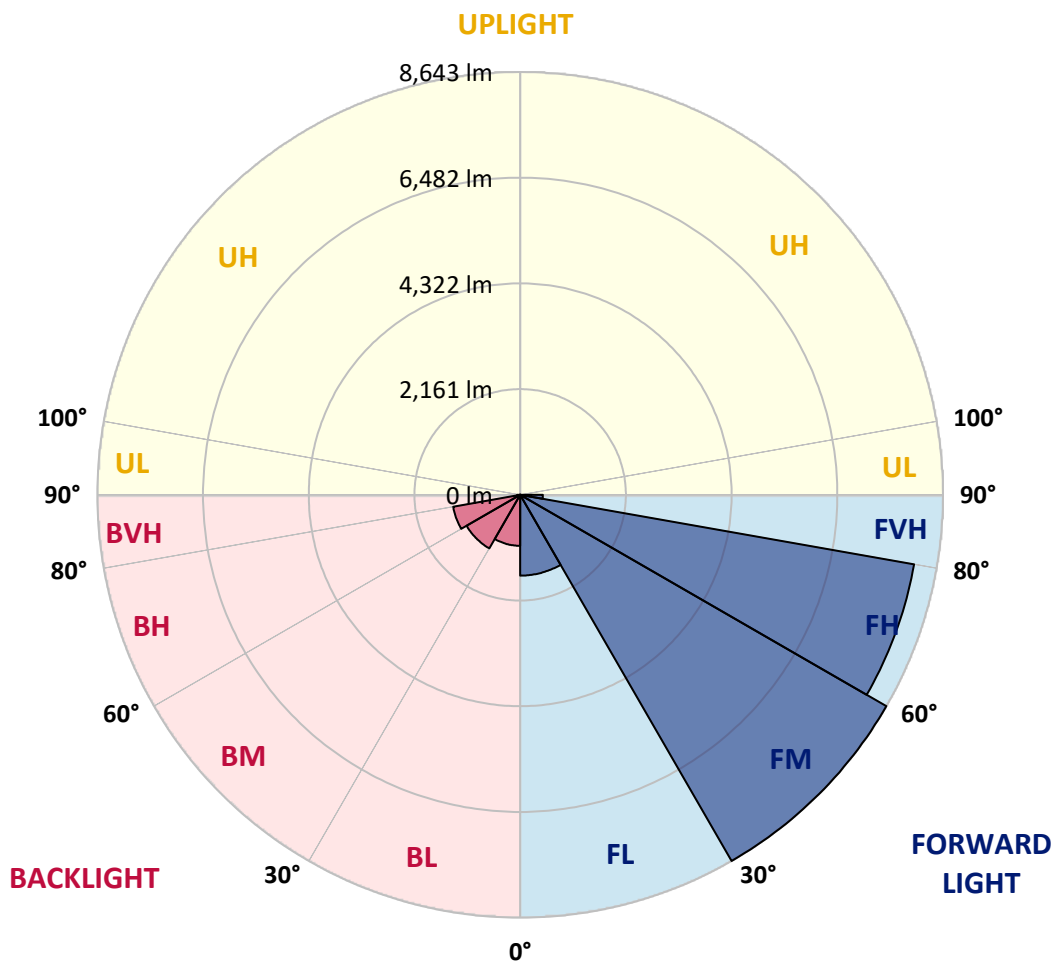
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1651.7	7.3			
FM (30°-60°)	8643.2	38.1			
FH (60°-80°)	8176.9	36.0			G4/12000
FVH (80°-90°)	463.8	2.0			G3/500
BL (0°-30°)	1042.3	4.6	B3/2500		
BM (30°-60°)	1263.6	5.6	B2/2500		
BH (60°-80°)	1390.9	6.1	B3/2500		G3/2500
BVH (80°-90°)	63.7	0.3			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	4895.5	4895.5	4895.5	4895.5	4895.5	4895.5	4895.5	4895.5	4895.5	4895.5	4895.5
2.5°	4694.0	4701.9	4726.5	4742.2	4812.7	4842.9	4864.2	4885.4	4888.8	4898.9	4888.8
5°	4201.6	4218.4	4264.3	4315.7	4452.3	4559.7	4672.8	4790.3	4811.6	4887.7	4908.9
7.5°	3819.9	3815.4	3853.5	3915.1	4055.0	4203.8	4401.9	4635.8	4681.7	4853.0	4935.8
10°	3541.2	3537.9	3578.2	3642.0	3775.2	3916.2	4140.0	4460.1	4525.0	4798.1	4961.5
12.5°	3335.3	3336.4	3376.7	3447.2	3582.6	3724.8	3952.0	4290.0	4372.8	4734.3	4988.4
15°	3198.8	3207.7	3240.2	3315.2	3447.2	3589.4	3812.1	4162.4	4255.3	4684.0	5018.6
17.5°	3152.9	3167.4	3178.6	3233.4	3346.5	3488.6	3706.9	4068.4	4166.9	4649.3	5045.5
20°	3195.4	3212.2	3190.9	3209.9	3281.6	3406.9	3624.1	3994.5	4095.3	4610.1	5048.8
22.5°	3377.8	3393.5	3330.8	3276.0	3271.5	3347.6	3555.8	3936.3	4040.4	4581.0	5050.0
25°	3699.0	3709.1	3603.9	3476.3	3352.1	3326.3	3507.7	3896.0	4006.8	4555.3	5028.7
27.5°	4093.0	4100.9	3980.0	3791.9	3542.4	3376.7	3490.9	3872.5	3987.8	4532.9	4992.9
30°	4572.0	4609.0	4446.7	4209.4	3845.7	3525.6	3524.4	3860.2	3966.5	4494.8	4922.4
32.5°	5062.3	5077.9	4966.0	4725.4	4254.2	3787.5	3618.5	3869.2	3960.9	4448.9	4832.8
35°	5559.2	5579.4	5506.6	5313.0	4812.7	4171.4	3802.0	3921.8	3995.6	4433.3	4770.1
37.5°	6202.8	6229.6	6128.9	5905.0	5492.1	4691.8	4107.6	4053.8	4102.0	4478.0	4751.1
40°	7220.1	7207.8	6913.5	6579.9	6235.2	5357.7	4544.1	4277.7	4305.7	4622.4	4809.3
42.5°	8404.3	8374.1	7867.1	7343.3	7052.3	6163.6	5121.6	4666.1	4660.5	4906.7	5014.1
45°	9348.9	9324.3	8867.6	8221.8	7989.0	7081.4	5868.1	5244.7	5203.3	5357.7	5392.4
47.5°	9860.4	9861.5	9598.5	9071.3	9065.7	8247.6	6827.3	6081.9	6010.3	6083.0	6046.1
50°	9681.3	9704.8	9676.8	9509.0	10048.4	9776.5	8079.7	7249.2	7104.9	7176.5	7034.3
52.5°	8815.0	8845.3	9010.9	9268.3	10461.4	11624.3	9919.7	8699.8	8531.9	8506.1	8348.3
55°	7279.5	7316.4	7654.4	8353.9	10117.8	12865.5	12823.0	10548.7	10281.2	10038.4	9971.2
57.5°	5017.5	5079.1	5623.0	6661.6	9006.4	13240.5	16280.3	13184.5	12640.6	11792.2	11807.9
60°	2828.3	2899.9	3541.2	4484.7	6763.5	12833.1	18910.5	17176.8	16028.5	13846.0	13962.4
62.5°	1798.6	1875.8	2362.7	3115.9	4058.3	10639.4	19988.3	22727.0	21268.7	16377.7	16491.8
65°	1456.1	1489.7	1719.1	2572.0	2946.9	6409.8	19170.1	27299.1	26755.1	19591.0	19058.2
67.5°	1421.4	1432.6	1551.2	2159.0	2826.1	3602.8	15290.9	28154.2	28757.4	22591.6	20127.1
70°	1404.6	1443.8	1748.2	2060.5	2706.3	3038.7	9188.9	25810.5	26763.0	23376.2	18704.5
72.5°	681.6	679.4	879.7	1863.5	3048.8	3151.7	4720.9	20883.7	21839.5	20252.4	15370.4
75°	549.5	502.5	480.1	682.7	2931.3	3254.7	3008.5	14369.8	15061.4	13578.5	9448.5
77.5°	521.6	465.6	426.4	427.5	1239.0	3451.7	2548.5	7953.2	8154.7	6133.4	2588.8
80°	432.0	380.5	352.6	397.3	599.9	3287.2	2755.5	3599.4	3302.8	1506.5	861.8
82.5°	300.0	273.1	265.3	333.5	480.1	2342.5	3204.3	1934.0	1621.8	754.4	531.6
85°	191.4	163.4	181.3	242.9	373.8	1081.2	3300.6	1507.6	1198.7	479.0	300.0
87.5°	88.4	71.6	89.5	134.3	244.0	372.7	3140.6	1693.4	1234.5	252.9	189.1
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°	4895.5	4895.5	4895.5	4895.5	4895.5	4895.5	4895.5	4895.5	4895.5	4895.5	4895.5
2.5°	4897.7	4876.5	4859.7	4828.3	4793.7	4760.1	4729.9	4691.8	4680.6	4670.5	4686.2
5°	4913.4	4892.1	4830.6	4734.3	4628.0	4528.4	4428.8	4343.7	4291.1	4262.0	4278.8
7.5°	4936.9	4906.7	4779.1	4602.3	4410.9	4236.3	4056.1	3911.7	3805.4	3755.0	3769.6
10°	4958.2	4900.0	4691.8	4426.5	4146.7	3887.1	3602.8	3367.8	3193.2	3101.4	3123.8
12.5°	4967.1	4874.2	4569.8	4207.2	3823.3	3442.7	3024.2	2672.7	2422.0	2330.2	2311.2
15°	4976.1	4845.1	4435.5	3957.6	3432.7	2894.3	2307.8	1887.0	1678.8	1633.0	1622.9
17.5°	4978.3	4794.8	4283.3	3686.7	2974.9	2241.8	1578.1	1310.6	1311.7	1385.6	1394.6
20°	4954.8	4719.8	4098.6	3349.8	2426.5	1550.1	1083.4	1037.5	1206.5	1391.2	1413.6
22.5°	4901.1	4620.2	3889.3	2957.0	1798.6	1020.7	838.3	888.7	1106.9	1333.0	1358.7
25°	4832.8	4499.3	3642.0	2501.5	1190.9	729.7	702.9	764.4	912.2	1063.3	1077.8
27.5°	4739.9	4356.0	3364.4	1979.9	773.4	601.0	618.9	660.3	720.8	787.9	794.7
30°	4620.2	4184.8	3067.8	1443.8	584.2	540.6	566.3	588.7	614.5	652.5	655.9
32.5°	4482.5	4020.3	2763.4	997.2	518.2	509.2	529.4	540.6	560.7	584.2	586.5
35°	4367.2	3863.6	2447.8	705.1	490.2	485.7	499.2	503.7	522.7	548.4	550.7
37.5°	4301.2	3736.0	2122.1	568.6	471.2	464.5	472.3	472.3	499.2	537.2	542.8
40°	4305.7	3665.5	1796.4	513.7	455.5	446.6	447.7	447.7	482.4	523.8	527.2
42.5°	4427.7	3683.4	1507.6	492.5	443.2	433.1	427.5	430.9	460.0	486.9	489.1
45°	4714.2	3809.9	1236.7	479.0	430.9	427.5	415.2	414.1	425.3	437.6	437.6
47.5°	5184.3	4059.4	1053.2	470.1	420.8	419.7	405.2	390.6	389.5	394.0	394.0
50°	5948.7	4489.2	930.1	460.0	414.1	405.2	388.4	366.0	358.2	361.5	361.5
52.5°	7094.8	5255.9	883.1	446.6	399.6	385.0	366.0	343.6	336.9	338.0	338.0
55°	8597.9	6433.3	876.4	430.9	383.9	360.4	344.7	327.9	320.1	322.3	322.3
57.5°	10434.6	8061.8	996.1	406.3	362.6	335.8	326.8	315.6	310.0	313.4	312.3
60°	12667.4	10192.8	1477.4	380.5	341.4	313.4	313.4	304.4	300.0	303.3	302.2
62.5°	15239.4	12640.6	2077.3	361.5	319.0	295.5	300.0	295.5	291.0	293.2	292.1
65°	17520.4	14235.5	1945.2	347.0	296.6	278.7	286.5	284.3	280.9	283.2	282.0
67.5°	17586.4	13644.5	1092.4	331.3	275.3	261.9	273.1	272.0	269.7	272.0	270.9
70°	15694.9	11521.3	615.6	302.2	252.9	241.8	257.4	256.3	254.1	258.5	257.4
72.5°	12574.5	8360.6	449.9	266.4	230.6	220.5	238.4	237.3	237.3	244.0	240.6
75°	7235.8	4302.3	359.3	228.3	207.1	199.2	214.9	216.0	218.2	227.2	220.5
77.5°	2062.7	1340.8	293.2	193.6	178.0	174.6	190.3	192.5	193.6	203.7	194.7
80°	766.7	617.8	241.8	162.3	145.5	146.6	161.2	164.5	165.6	175.7	164.5
82.5°	489.1	407.4	195.9	125.4	114.2	113.0	130.9	135.4	135.4	136.5	129.8
85°	285.4	244.0	147.7	90.7	80.6	77.2	97.4	105.2	101.8	99.6	95.1
87.5°	191.4	167.9	90.7	50.4	43.6	41.4	57.1	62.7	60.4	57.1	53.7
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)