

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: P453590

Luminaire Tested: **GALN-SA4C-827-U-SL2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453590  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA4C-827-U-SL2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20408 lumens  
Efficiency: N/A  
Efficacy: 95.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

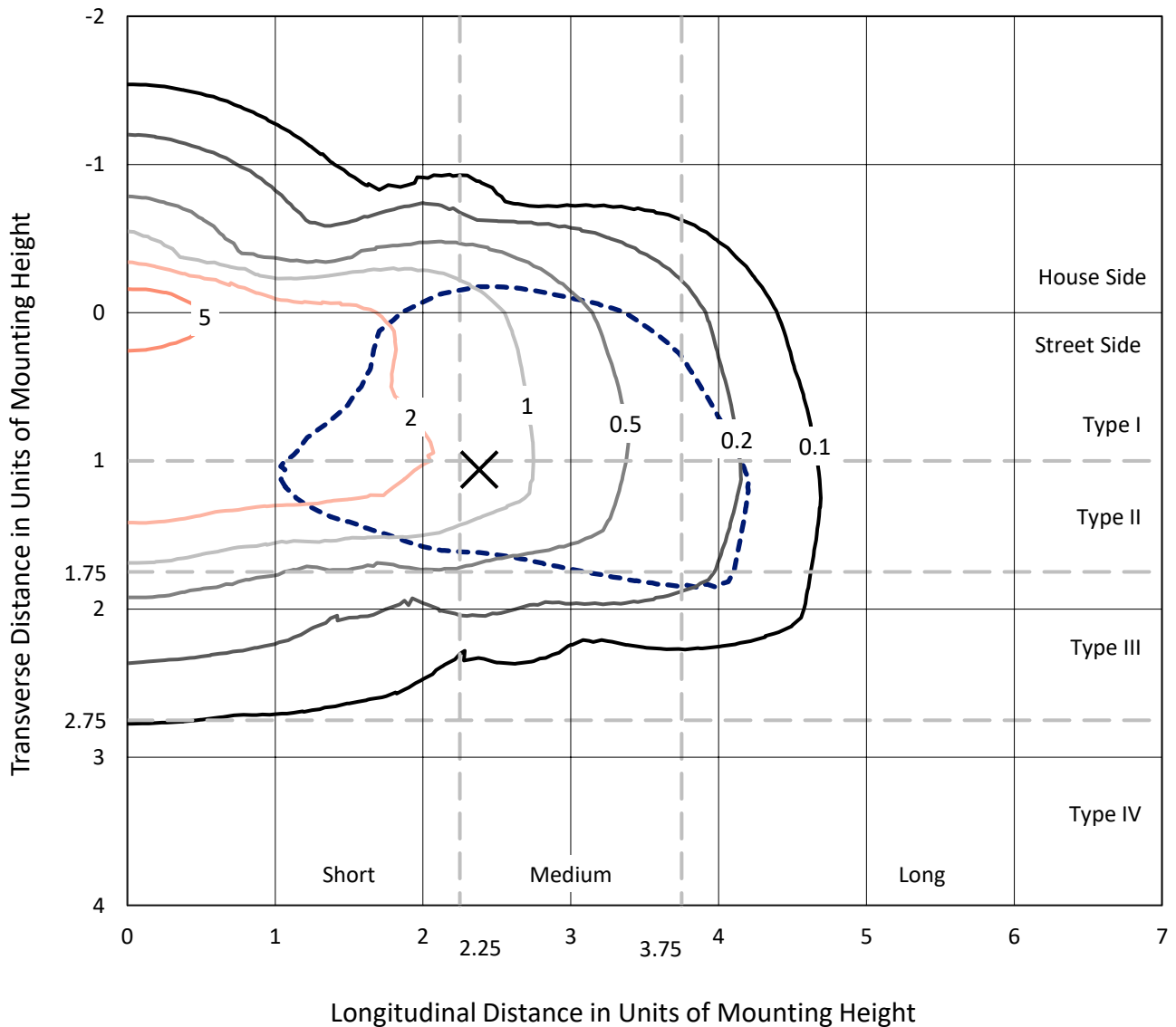
Input Watts (W): 213  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

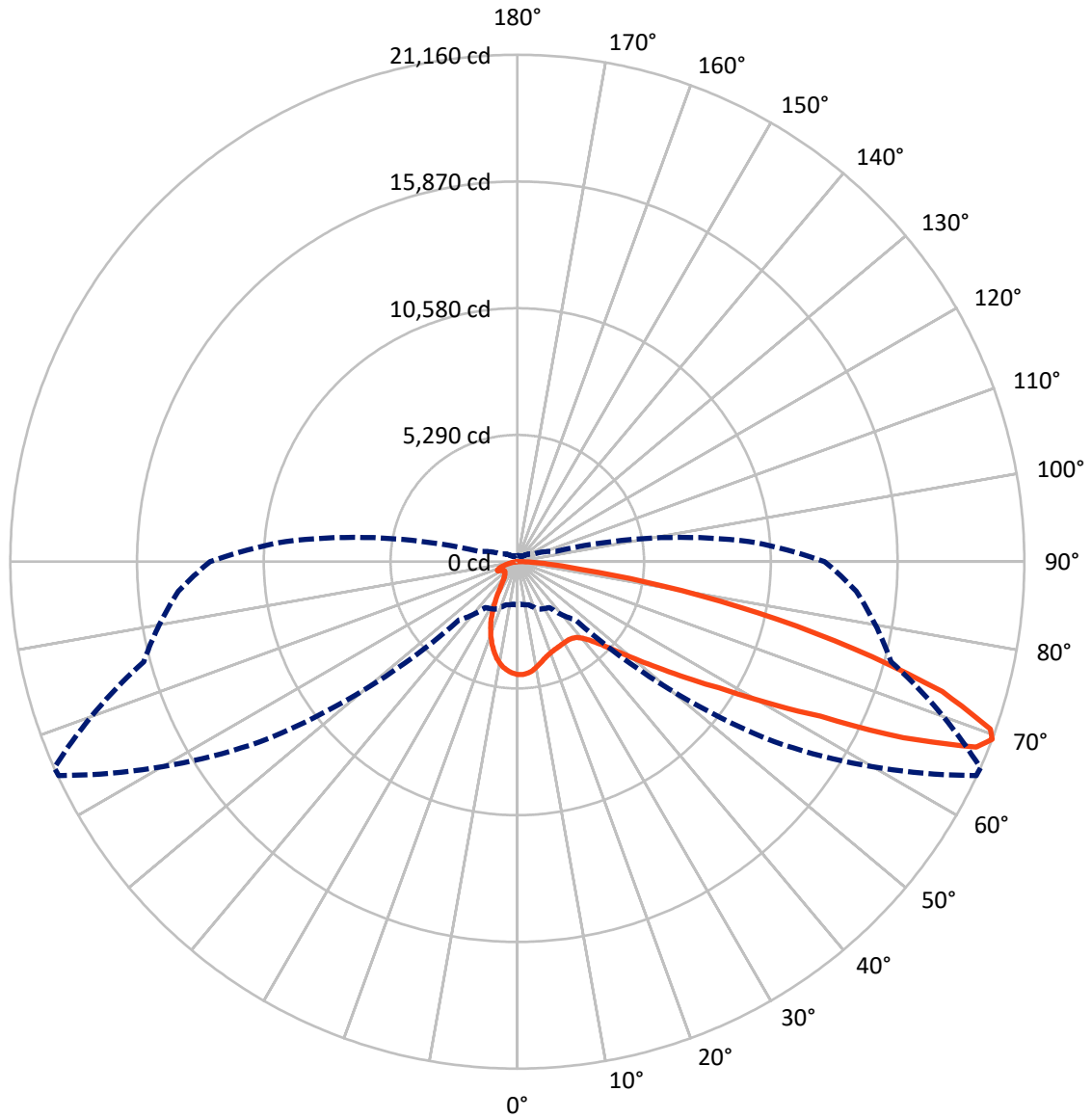
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3838.0	0.0	3838.0
	% Fixture	18.8	0.0	18.8
<b>Street Side</b>	Lumens	16570.0	0.0	16570.0
	% Fixture	81.2	0.0	81.2
<b>Total</b>	Lumens	20408.0	0.0	20408.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	409.3	2.0
10°-20°	970.7	4.8
20°-30°	1321.5	6.5
30°-40°	1775.8	8.7
40°-50°	2651.6	13.0
50°-60°	4217.8	20.7
60°-70°	5187.6	25.4
70°-80°	3375.3	16.5
80°-90°	498.4	2.4
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°	20408.0	100.0
0°-180°	20408.0	100.0

**Coefficient of Utilization**



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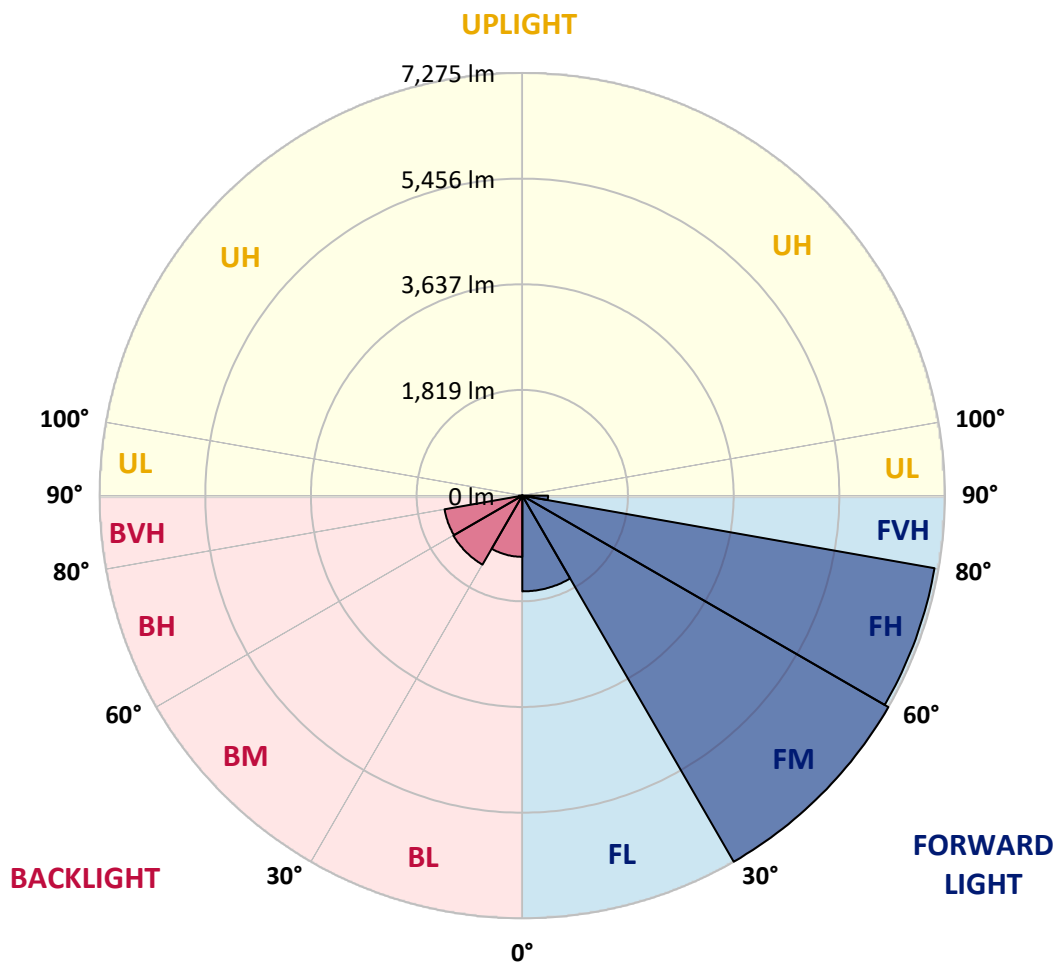
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1647.9	8.1			
FM	(30°-60°)	7274.8	35.6			
FH	(60°-80°)	7204.1	35.3			G3/7500
FVH	(80°-90°)	443.1	2.2			G3/500
BL	(0°-30°)	1053.5	5.2	B3/2500		
BM	(30°-60°)	1370.3	6.7	B2/2500		
BH	(60°-80°)	1358.8	6.7	B3/2500		G3/2500
BVH	(80°-90°)	55.3	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-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4712.8	4712.8	4712.8	4712.8	4712.8	4712.8	4712.8	4712.8	4712.8	4712.8	4712.8
2.5°	4547.8	4565.9	4586.2	4608.8	4651.7	4675.5	4692.4	4711.6	4713.9	4724.1	4716.2
5°	4212.1	4233.6	4264.1	4307.0	4371.5	4472.0	4576.0	4660.8	4671.0	4718.4	4732.0
7.5°	3931.8	3944.3	3969.1	4038.1	4129.6	4241.5	4392.9	4564.7	4589.6	4702.6	4742.2
10°	3703.5	3716.0	3745.4	3816.6	3907.0	4047.1	4213.2	4439.3	4459.6	4654.0	4744.4
12.5°	3532.9	3544.2	3575.8	3645.9	3749.9	3881.0	4064.1	4303.7	4333.0	4589.6	4722.9
15°	3402.9	3424.4	3450.4	3508.0	3617.6	3744.2	3921.7	4179.3	4203.1	4521.8	4708.3
17.5°	3347.5	3357.7	3375.8	3428.9	3509.2	3633.5	3812.0	4082.1	4110.4	4474.3	4704.9
20°	3349.8	3360.0	3363.4	3392.7	3450.4	3557.7	3734.1	4005.3	4039.2	4432.5	4710.5
22.5°	3426.7	3427.8	3415.3	3405.2	3427.8	3517.1	3678.7	3947.7	3987.2	4414.4	4715.0
25°	3545.3	3565.7	3547.6	3500.1	3458.3	3501.2	3657.2	3916.0	3953.3	4388.4	4709.4
27.5°	3737.4	3740.8	3726.1	3661.7	3553.2	3521.6	3648.2	3892.3	3923.9	4369.2	4681.1
30°	3995.1	3985.0	3971.4	3900.2	3729.5	3599.6	3667.4	3870.8	3903.6	4341.0	4647.2
32.5°	4256.2	4287.8	4275.4	4191.8	3970.3	3751.0	3729.5	3868.5	3895.7	4319.5	4609.9
35°	4533.1	4547.8	4606.5	4563.6	4336.4	3996.3	3845.9	3903.6	3925.1	4320.6	4583.9
37.5°	4750.1	4789.6	4927.5	4964.8	4751.2	4320.6	4034.7	4003.0	4012.1	4376.0	4594.1
40°	5012.3	5080.1	5257.5	5410.1	5269.9	4742.2	4355.6	4187.2	4198.6	4509.3	4660.8
42.5°	5344.5	5392.0	5630.5	5837.3	5814.7	5299.3	4744.4	4489.0	4494.7	4774.9	4847.3
45°	5733.3	5801.1	6069.0	6379.8	6432.9	5930.0	5306.1	4945.6	4942.2	5187.4	5195.4
47.5°	6230.6	6272.4	6538.0	6877.0	7091.8	6722.2	5987.6	5601.1	5564.9	5788.7	5724.3
50°	6688.3	6753.8	6955.0	7325.7	7860.3	7650.1	6883.8	6451.0	6366.2	6575.3	6466.8
52.5°	6880.4	6949.4	7118.9	7578.9	8519.2	8850.3	8021.9	7464.7	7323.4	7483.9	7444.4
55°	6547.0	6636.3	6794.5	7354.0	8808.5	10234.7	9556.6	8636.7	8533.9	8464.9	8476.2
57.5°	5650.8	5735.6	5949.2	6566.2	8462.7	11239.5	11748.0	10143.2	9922.8	9605.2	9659.5
60°	4301.4	4354.5	4465.3	5149.0	7437.6	11500.5	14236.6	12047.5	11907.4	10741.1	10779.5
62.5°	3054.8	3114.7	3191.6	3532.9	5445.1	10764.8	16185.0	14706.8	14206.1	11917.6	11880.3
65°	2480.7	2440.0	2532.7	2692.0	3195.0	8342.9	16623.5	18397.9	17708.5	13467.0	12949.4
67.5°	2039.9	1997.0	2088.5	2372.2	2429.8	4842.7	15043.6	20793.8	20656.0	15152.1	14035.5
69°	1806.0	1783.4	1863.6	2186.9	2332.7	3439.1	13105.4	21127.2	21160.0	16145.5	14202.7
70°	1627.4	1636.5	1714.5	2093.1	2288.6	2835.6	11201.0	20667.3	20945.3	16641.6	14021.9
72.5°	1198.0	1217.2	1325.7	1733.7	2246.8	2406.1	6665.7	18052.1	18543.7	16671.0	12827.3
75°	837.4	828.4	924.5	1305.3	2122.4	2384.6	3914.9	13960.9	14518.1	14409.6	10778.4
77.5°	548.1	562.8	639.7	922.2	1785.7	2366.6	2551.9	9904.7	10266.4	9636.9	6375.2
80°	386.5	385.4	428.3	629.5	1324.5	2273.9	2089.7	6243.0	6151.5	3787.2	1890.8
82.5°	221.5	237.3	287.1	443.0	886.0	2001.5	1922.4	2985.9	2725.9	1079.3	638.5
85°	123.2	128.8	170.7	267.8	517.6	1507.6	1678.3	1358.5	1281.6	450.9	274.6
87.5°	39.6	42.9	71.2	135.6	235.1	712.0	950.5	627.2	578.6	162.7	110.8
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°	4712.8	4712.8	4712.8	4712.8	4712.8	4712.8	4712.8	4712.8	4712.8	4712.8	4712.8
2.5°	4719.6	4733.1	4697.0	4661.9	4630.3	4586.2	4546.6	4513.9	4491.3	4487.9	4476.6
5°	4735.4	4736.5	4667.6	4574.9	4484.5	4385.0	4282.2	4208.7	4139.8	4101.4	4082.1
7.5°	4746.7	4736.5	4612.2	4461.9	4287.8	4107.0	3926.2	3781.5	3669.6	3625.6	3642.5
10°	4742.2	4710.5	4528.6	4287.8	4034.7	3764.6	3504.6	3301.2	3114.7	3018.7	3020.9
12.5°	4717.3	4665.3	4404.2	4092.3	3720.5	3358.8	2961.0	2686.4	2470.5	2342.8	2303.3
15°	4695.8	4605.4	4258.4	3826.7	3364.5	2848.0	2363.2	2024.1	1843.3	1742.7	1741.6
17.5°	4673.2	4547.8	4099.1	3545.3	2955.4	2290.8	1782.3	1523.5	1438.7	1448.9	1431.9
20°	4649.5	4480.0	3933.0	3232.3	2457.0	1708.8	1334.7	1229.6	1253.3	1299.7	1306.5
22.5°	4622.4	4407.6	3754.4	2887.6	1932.6	1286.1	1082.7	1066.9	1127.9	1200.2	1210.4
25°	4580.5	4317.2	3529.5	2527.0	1490.7	1036.4	948.2	959.5	1019.4	1080.4	1087.2
27.5°	4521.8	4205.3	3302.3	2077.2	1120.0	889.4	866.8	881.5	910.9	948.2	957.2
30°	4442.7	4078.8	3041.3	1688.5	897.3	816.0	806.9	814.8	831.8	847.6	852.1
32.5°	4363.6	3956.7	2777.9	1292.9	800.2	767.4	758.3	758.3	758.3	760.6	761.7
35°	4290.1	3841.4	2495.4	1007.0	749.3	729.0	716.5	703.0	700.7	692.8	692.8
37.5°	4249.4	3736.3	2194.8	843.1	712.0	697.3	680.4	657.8	645.3	646.5	644.2
40°	4257.3	3667.4	1921.3	750.4	681.5	665.7	639.7	613.7	605.8	605.8	603.5
42.5°	4346.6	3644.8	1659.1	701.8	652.1	634.0	601.2	577.5	573.0	571.9	574.1
45°	4552.3	3700.1	1424.0	670.2	627.2	600.1	567.3	545.9	541.3	541.3	540.2
47.5°	4953.5	3879.8	1255.6	649.8	609.2	574.1	540.2	518.7	510.8	508.6	508.6
50°	5577.3	4269.8	1130.2	631.8	586.6	550.4	515.4	490.5	478.1	476.9	475.8
52.5°	6444.2	4877.8	1081.6	618.2	561.7	525.5	487.1	463.4	447.5	444.2	441.9
55°	7457.9	5726.5	1148.2	608.0	535.7	497.3	457.7	432.9	418.2	411.4	410.2
57.5°	8632.2	6745.9	1401.4	594.5	512.0	466.8	428.3	403.5	387.6	379.7	377.5
60°	9686.6	7793.6	1843.3	586.6	491.6	434.0	394.4	371.8	357.1	349.2	348.1
62.5°	10845.0	8792.7	2371.1	608.0	482.6	402.3	362.8	342.4	330.0	322.1	322.1
65°	12082.6	9792.9	2720.3	680.4	496.1	377.5	328.9	311.9	300.6	295.0	293.8
67.5°	12916.6	10138.7	2241.1	754.9	530.0	350.4	296.1	282.5	275.8	270.1	270.1
69°	12826.2	9701.3	1653.4	774.2	540.2	336.8	278.0	267.8	258.8	256.5	254.3
70°	12540.3	9202.9	1385.6	761.7	532.3	324.4	266.7	254.3	246.4	244.1	243.0
72.5°	11169.4	7981.2	1031.8	662.3	453.2	281.4	236.2	224.9	218.1	214.7	214.7
75°	9279.8	6523.3	805.8	526.7	354.9	237.3	202.3	193.3	187.6	185.3	184.2
77.5°	5201.0	3642.5	578.6	412.5	269.0	192.1	169.5	161.6	156.0	153.7	153.7
80°	1448.9	1040.9	340.2	272.4	183.1	145.8	134.5	128.8	120.9	115.3	118.7
82.5°	545.9	450.9	194.4	163.9	116.4	97.2	93.8	89.3	85.9	78.0	78.0
85°	265.6	219.3	124.3	87.0	64.4	50.9	48.6	46.3	44.1	38.4	39.6
87.5°	91.5	97.2	54.2	31.6	19.2	12.4	10.2	5.7	5.7	5.7	5.7
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)