

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: P651507

Luminaire Tested: **GALN-SA7D-840-U-SL2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651507
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-SA7D-840-U-SL2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 4000K, 1200mA 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: 45232.3 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G5

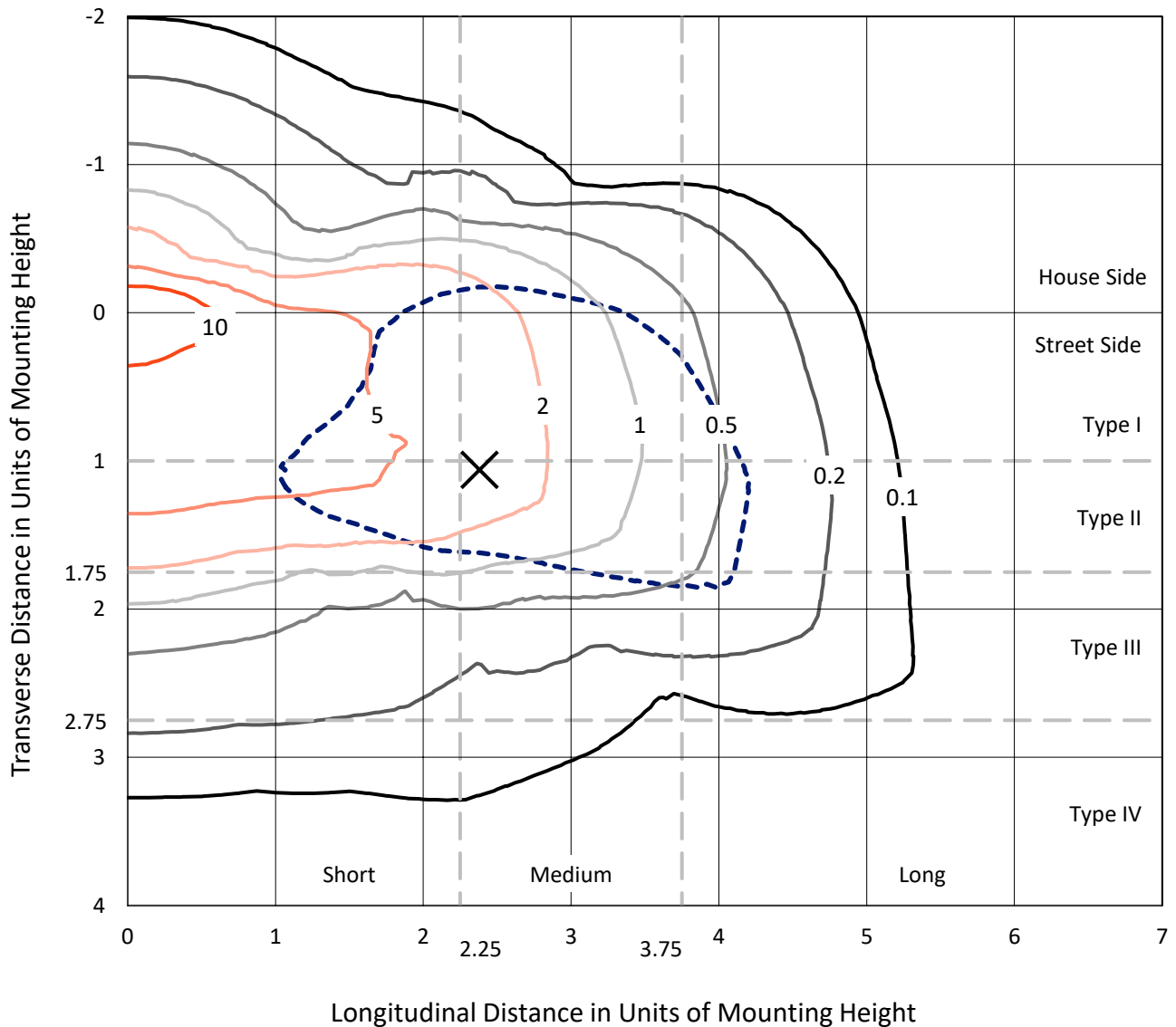
Input Watts (W): 433
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

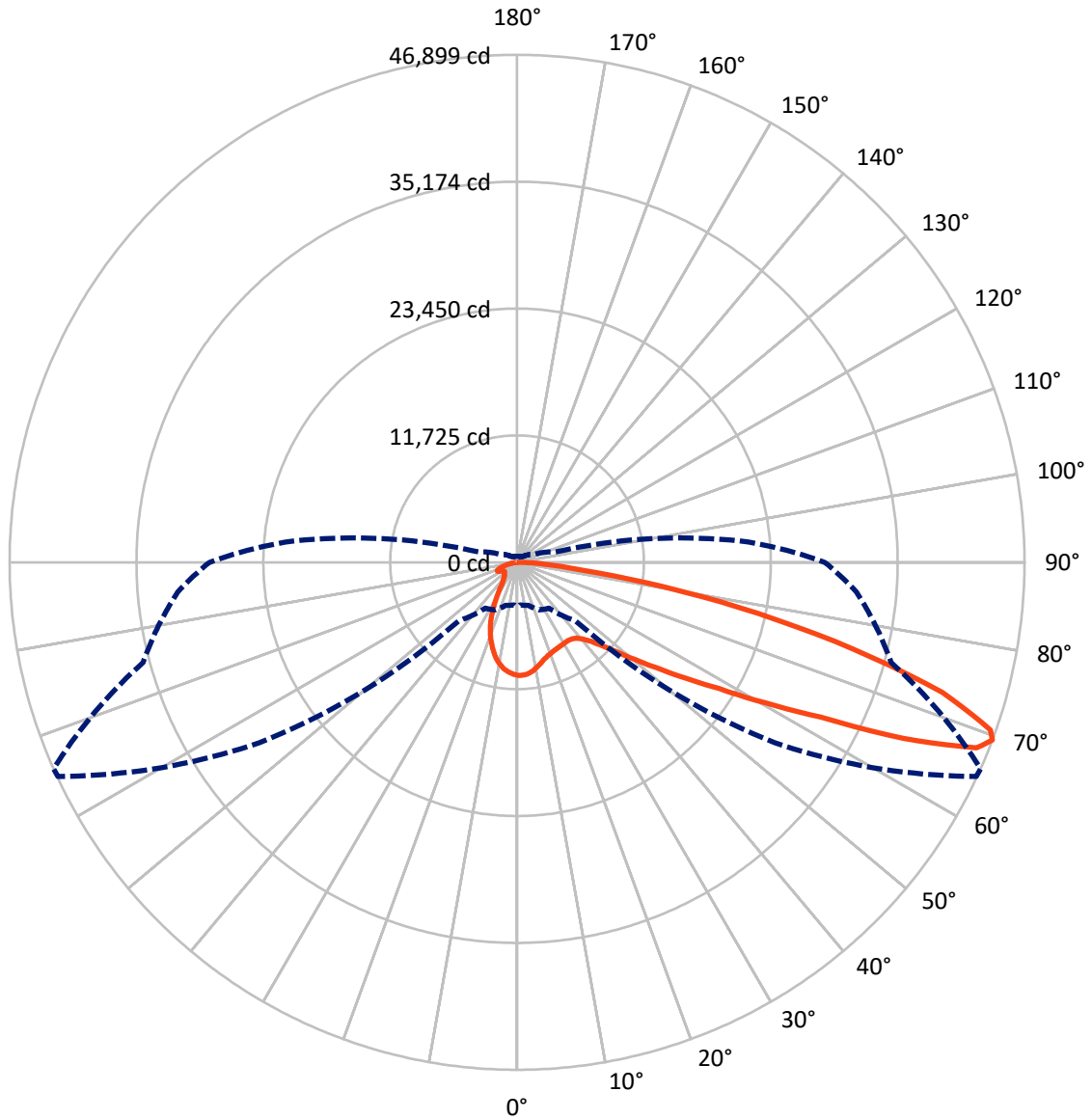
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.7 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
House Side	Lumens	8506.5	0.0	8506.5
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	36725.8	0.0	36725.8
	% Fixture	81.2	0.0	81.2
Total	Lumens	45232.3	0.0	45232.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	907.1	2.0
10°-20°	2151.5	4.8
20°-30°	2929.0	6.5
30°-40°	3935.9	8.7
40°-50°	5877.0	13.0
50°-60°	9348.3	20.7
60°-70°	11497.9	25.4
70°-80°	7481.0	16.5
80°-90°	1104.7	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°	45232.3	100.0
0°-180°	45232.3	100.0

Coefficient of Utilization

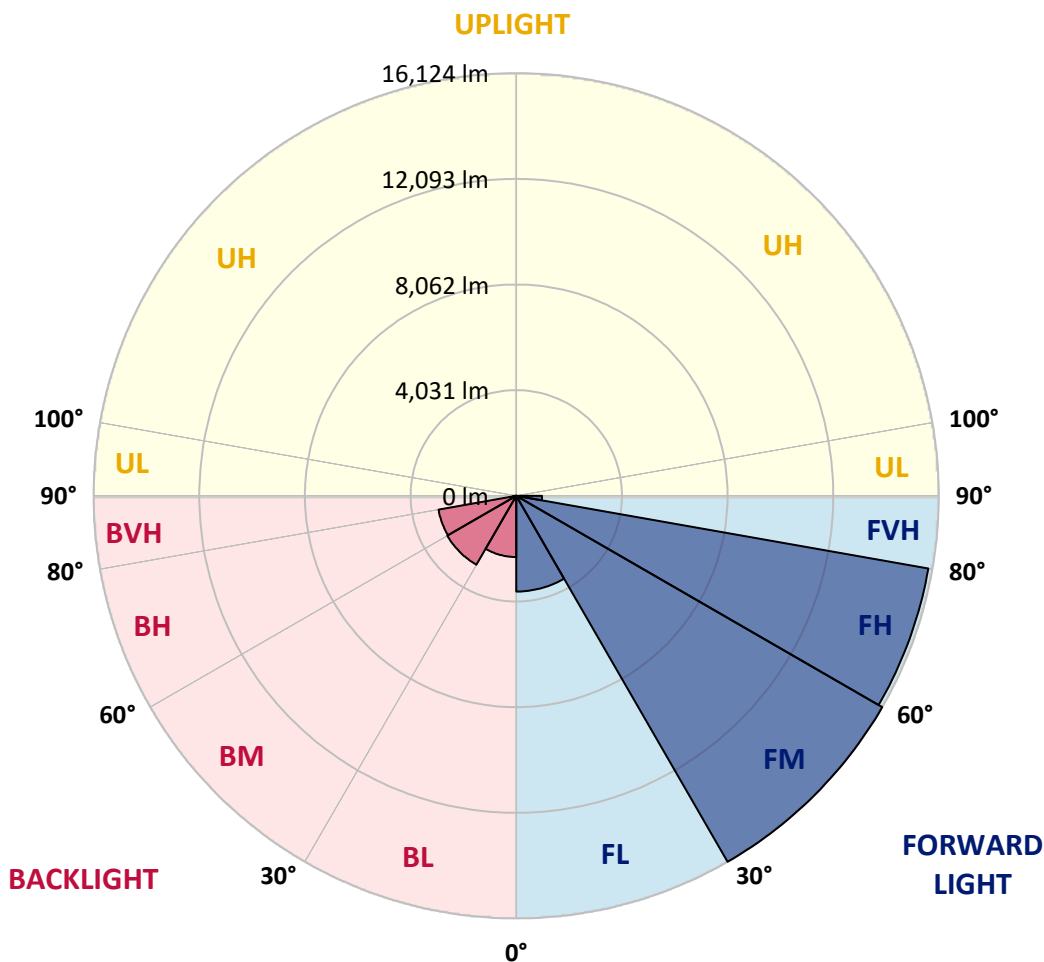


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3652.5	8.1			
FM (30°-60°)	16124.0	35.6			
FH (60°-80°)	15967.2	35.3			G5
FVH (80°-90°)	982.2	2.2			G5
BL (0°-30°)	2335.1	5.2	B3/2500		
BM (30°-60°)	3037.2	6.7	B3/5000		
BH (60°-80°)	3011.7	6.7	B4/5000		G4/5000
BVH (80°-90°)	122.6	0.3			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	10445.4	10445.4	10445.4	10445.4	10445.4	10445.4	10445.4	10445.4	10445.4	10445.4	10445.4
2.5°	10079.7	10119.8	10164.8	10215.0	10310.2	10362.7	10400.3	10442.9	10447.9	10470.4	10453.0
5°	9335.8	9383.3	9451.0	9546.1	9688.9	9911.9	10142.3	10330.2	10352.7	10457.9	10488.0
7.5°	8714.5	8742.1	8797.2	8950.0	9152.9	9400.9	9736.5	10117.2	10172.4	10422.8	10510.6
10°	8208.5	8236.1	8301.2	8459.0	8659.4	8970.0	9338.2	9839.2	9884.3	10315.1	10515.5
12.5°	7830.3	7855.4	7925.5	8080.7	8311.3	8601.8	9007.6	9538.6	9603.8	10172.4	10467.9
15°	7542.3	7589.9	7647.5	7775.2	8018.2	8298.7	8692.0	9263.1	9315.7	10022.1	10435.4
17.5°	7419.5	7442.0	7482.1	7599.9	7777.7	8053.2	8449.0	9047.6	9110.3	9916.9	10427.9
20°	7424.5	7447.1	7454.5	7519.7	7647.5	7885.4	8276.2	8877.3	8952.5	9824.2	10440.4
22.5°	7594.8	7597.3	7569.8	7547.2	7597.3	7795.2	8153.4	8749.6	8837.2	9784.1	10450.4
25°	7857.9	7903.0	7862.8	7757.6	7665.0	7760.2	8105.8	8679.5	8762.1	9726.5	10437.9
27.5°	8283.7	8291.2	8258.6	8115.8	7875.4	7805.2	8085.8	8626.9	8696.9	9683.9	10375.2
30°	8854.8	8832.3	8802.2	8644.4	8266.2	7978.1	8128.3	8579.3	8651.9	9621.3	10300.1
32.5°	9433.4	9503.6	9476.1	9290.6	8799.7	8313.7	8266.2	8574.2	8634.4	9573.7	10217.5
35°	10047.1	10079.7	10209.9	10114.8	9611.3	8857.3	8524.1	8651.9	8699.5	9576.2	10159.9
37.5°	10528.1	10615.8	10921.3	11004.0	10530.6	9576.2	8942.4	8872.3	8892.4	9698.9	10182.4
40°	11109.2	11259.5	11652.7	11990.9	11680.3	10510.6	9653.8	9280.6	9305.7	9994.5	10330.2
42.5°	11845.7	11950.9	12479.3	12937.8	12887.7	11745.4	10515.5	9949.5	9962.0	10583.1	10743.5
45°	12707.3	12857.6	13451.3	14140.2	14257.9	13143.1	11760.5	10961.4	10953.9	11497.5	11515.0
47.5°	13809.5	13902.2	14490.8	15242.3	15718.2	14899.1	13270.9	12414.3	12334.1	12830.0	12687.3
50°	14824.0	14969.2	15415.1	16236.7	17421.6	16955.7	15257.3	14297.9	14110.0	14573.4	14333.0
52.5°	15249.8	15402.6	15778.3	16797.8	18881.9	19615.8	17779.7	16544.8	16231.7	16587.4	16499.7
55°	14510.9	14708.8	15059.5	16299.3	19523.1	22684.3	21181.3	19142.4	18914.4	18761.6	18786.7
57.5°	12524.5	12712.3	13185.8	14553.4	18756.7	24911.2	26038.4	22481.4	21993.0	21289.1	21409.3
60°	9533.7	9651.3	9896.8	11412.3	16484.7	25489.8	31554.2	26702.2	26391.6	23806.5	23891.6
62.5°	6770.7	6903.5	7073.8	7830.3	12068.6	23859.1	35872.6	32596.2	31486.5	26414.1	26331.5
65°	5498.2	5408.1	5613.5	5966.6	7081.3	18491.2	36844.5	40777.1	39249.1	29848.3	28701.1
67.5°	4521.3	4426.2	4629.0	5257.8	5385.5	10733.4	33342.6	46087.6	45781.9	33583.1	31108.3
69°	4002.8	3952.7	4130.6	4846.9	5170.1	7622.4	29046.7	46826.5	46899.1	35784.9	31479.0
70°	3607.0	3627.1	3799.9	4639.0	5072.4	6284.8	24826.0	45807.0	46423.2	36884.6	31078.2
72.5°	2655.2	2697.8	2938.2	3842.5	4979.7	5332.9	14773.8	40010.7	41100.3	36949.7	28430.5
75°	1856.1	1836.1	2049.0	2893.1	4704.2	5285.3	8676.9	30942.9	32177.8	31937.4	23889.2
77.5°	1214.9	1247.5	1417.8	2044.0	3957.7	5245.2	5656.1	21952.9	22754.4	21359.2	14130.1
80°	856.6	854.2	949.3	1395.2	2935.8	5039.9	4631.6	13837.1	13634.1	8393.9	4190.7
82.5°	491.0	526.0	636.2	982.0	1963.8	4436.2	4260.8	6617.9	6041.8	2392.1	1415.2
85°	273.1	285.5	378.2	593.7	1147.2	3341.5	3719.7	3010.9	2840.6	999.4	608.7
87.5°	87.6	95.2	157.8	300.6	521.0	1578.1	2106.6	1390.3	1282.5	360.7	245.5
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°	10445.4	10445.4	10445.4	10445.4	10445.4	10445.4	10445.4	10445.4	10445.4	10445.4	10445.4
2.5°	10460.4	10490.5	10410.3	10332.7	10262.6	10164.8	10077.2	10004.5	9954.4	9946.9	9921.9
5°	10495.5	10498.0	10345.2	10139.8	9939.4	9719.0	9491.0	9328.2	9175.4	9090.3	9047.6
7.5°	10520.6	10498.0	10222.4	9889.3	9503.6	9102.8	8702.0	8381.4	8133.4	8035.7	8073.3
10°	10510.6	10440.4	10037.1	9503.6	8942.4	8343.8	7767.6	7316.8	6903.5	6690.6	6695.6
12.5°	10455.4	10340.2	9761.6	9070.2	8246.1	7444.5	6562.8	5954.1	5475.7	5192.7	5105.0
15°	10407.8	10207.5	9438.5	8481.6	7457.1	6312.3	5237.7	4486.2	4085.5	3862.5	3860.0
17.5°	10357.8	10079.7	9085.2	7857.9	6550.3	5077.5	3950.2	3376.6	3188.7	3211.3	3173.7
20°	10305.1	9929.4	8717.0	7164.0	5445.6	3787.4	2958.3	2725.3	2777.9	2880.6	2895.6
22.5°	10245.0	9769.1	8321.3	6400.0	4283.4	2850.6	2399.7	2364.6	2499.9	2660.2	2682.7
25°	10152.3	9568.7	7822.8	5601.0	3304.0	2297.0	2101.6	2126.6	2259.4	2394.7	2409.7
27.5°	10022.1	9320.7	7319.3	4604.0	2482.4	1971.4	1921.3	1953.8	2018.9	2101.6	2121.7
30°	9846.8	9040.2	6740.7	3742.3	1988.9	1808.6	1788.5	1806.0	1843.6	1878.7	1888.7
32.5°	9671.4	8769.6	6157.0	2865.6	1773.5	1700.8	1680.8	1680.8	1680.8	1685.8	1688.3
35°	9508.6	8514.1	5530.8	2231.8	1660.7	1615.6	1588.1	1558.0	1553.1	1535.5	1535.5
37.5°	9418.4	8281.2	4864.5	1868.6	1578.1	1545.5	1507.9	1457.9	1430.3	1432.8	1427.8
40°	9435.9	8128.3	4258.3	1663.2	1510.4	1475.4	1417.8	1360.1	1342.7	1342.7	1337.6
42.5°	9633.8	8078.3	3677.2	1555.5	1445.3	1405.2	1332.6	1280.0	1270.0	1267.5	1272.5
45°	10089.7	8201.0	3156.2	1485.4	1390.3	1330.1	1257.5	1209.9	1199.9	1199.9	1197.3
47.5°	10978.9	8599.3	2783.0	1440.3	1350.1	1272.5	1197.3	1149.7	1132.2	1127.2	1127.2
50°	12361.6	9463.5	2504.9	1400.3	1300.0	1219.9	1142.2	1087.2	1059.6	1057.1	1054.5
52.5°	14282.9	10811.1	2397.2	1370.2	1244.9	1164.8	1079.6	1027.0	992.0	984.4	979.4
55°	16529.8	12692.3	2545.0	1347.6	1187.3	1102.1	1014.5	959.4	926.8	911.8	909.3
57.5°	19132.4	14951.7	3106.1	1317.6	1134.7	1034.5	949.3	894.2	859.2	841.7	836.6
60°	21469.5	17273.7	4085.5	1300.0	1089.6	961.9	874.2	824.1	791.5	774.0	771.5
62.5°	24037.0	19488.1	5255.2	1347.6	1069.6	891.7	804.1	759.0	731.4	713.9	713.9
65°	26779.8	21704.9	6029.3	1507.9	1099.6	836.6	728.9	691.4	666.3	653.8	651.3
67.5°	28628.4	22471.4	4967.2	1673.3	1174.8	776.5	656.3	626.2	611.2	598.7	598.7
69°	28428.1	21502.0	3664.7	1715.9	1197.3	746.5	616.2	593.7	573.6	568.6	563.6
70°	27794.3	20397.4	3071.0	1688.3	1179.8	718.9	591.1	563.6	546.1	541.0	538.6
72.5°	24755.8	17689.6	2286.9	1467.9	1004.5	623.7	523.5	498.5	483.4	475.9	475.9
75°	20567.7	14458.2	1785.9	1167.3	786.5	526.0	448.3	428.3	415.8	410.8	408.3
77.5°	11527.5	8073.3	1282.5	914.3	596.2	425.8	375.8	358.2	345.7	340.7	340.7
80°	3211.3	2307.0	754.0	603.7	405.8	323.1	298.1	285.5	268.0	255.5	263.0
82.5°	1209.9	999.4	430.8	363.2	258.0	215.4	207.9	197.9	190.4	172.8	172.8
85°	588.6	485.9	275.5	192.8	142.8	112.7	107.7	102.7	97.7	85.2	87.6
87.5°	202.9	215.4	120.3	70.1	42.6	27.6	22.5	12.5	12.5	12.5	12.5
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)