

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: P456608

Luminaire Tested: **GALN-SA7D-827-U-SL3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456608
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA7D-827-U-SL3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 2700K, 1200mA 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: 39260 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G5

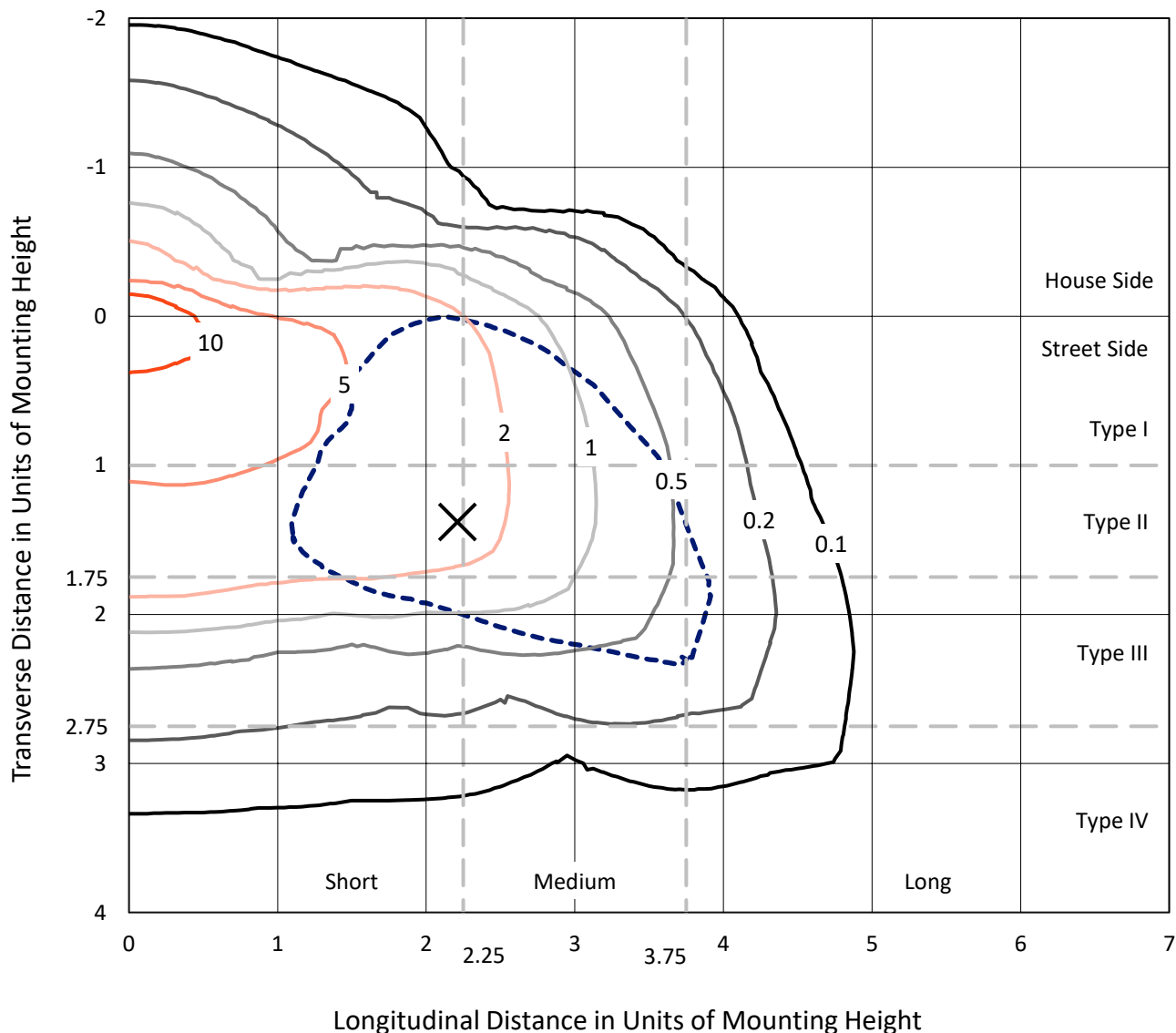
Input Watts (W): 433
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

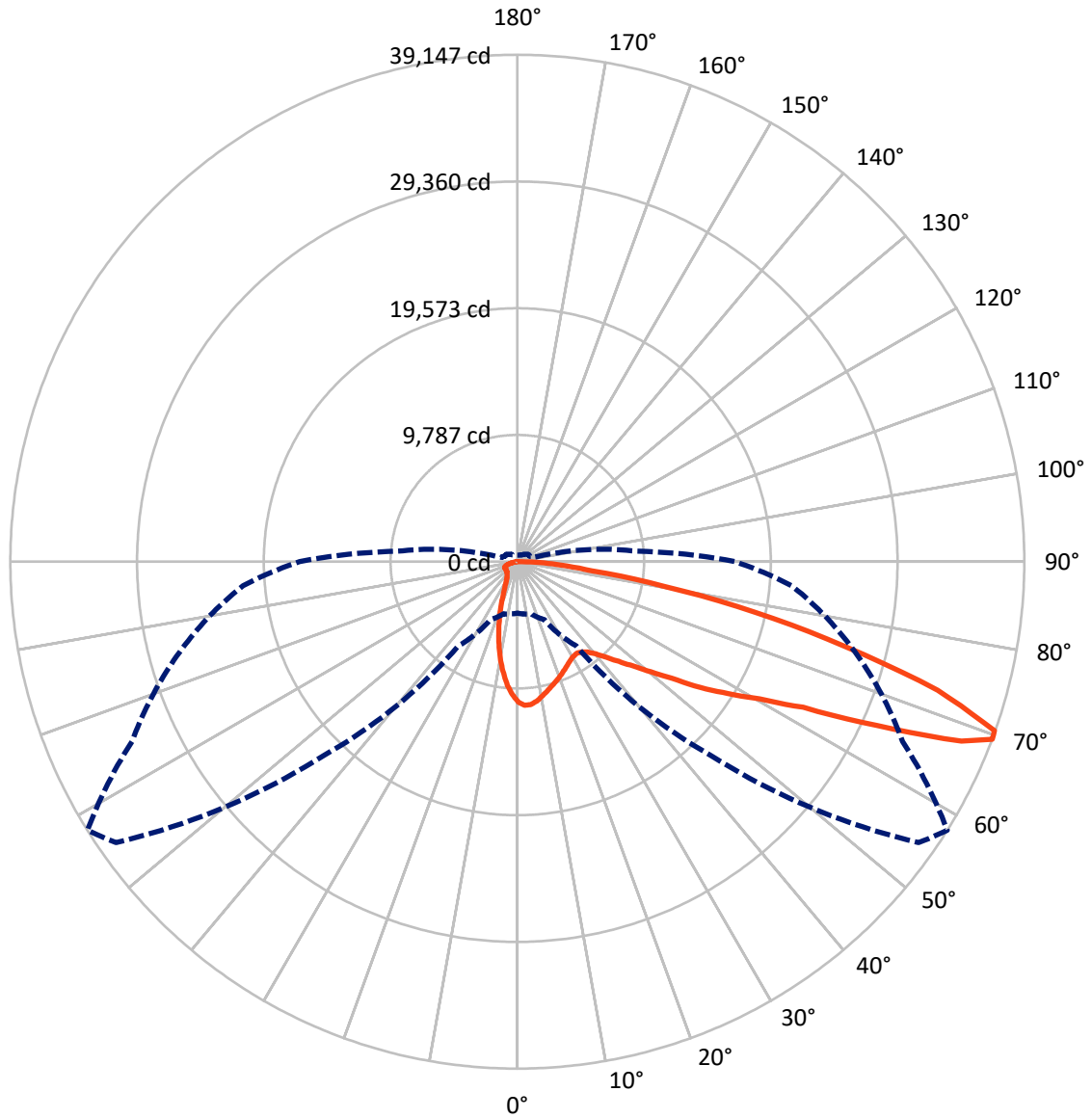
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5753.5	0.0	5753.5
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	33506.5	0.0	33506.5
	% Fixture	85.3	0.0	85.3
Total	Lumens	39260.0	0.0	39260.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	921.4	2.3
10°-20°	2023.2	5.2
20°-30°	2613.9	6.7
30°-40°	3395.0	8.6
40°-50°	4935.8	12.6
50°-60°	7876.0	20.1
60°-70°	10521.3	26.8
70°-80°	6065.1	15.4
80°-90°	908.4	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°	39260.0	100.0
0°-180°	39260.0	100.0

Coefficient of Utilization



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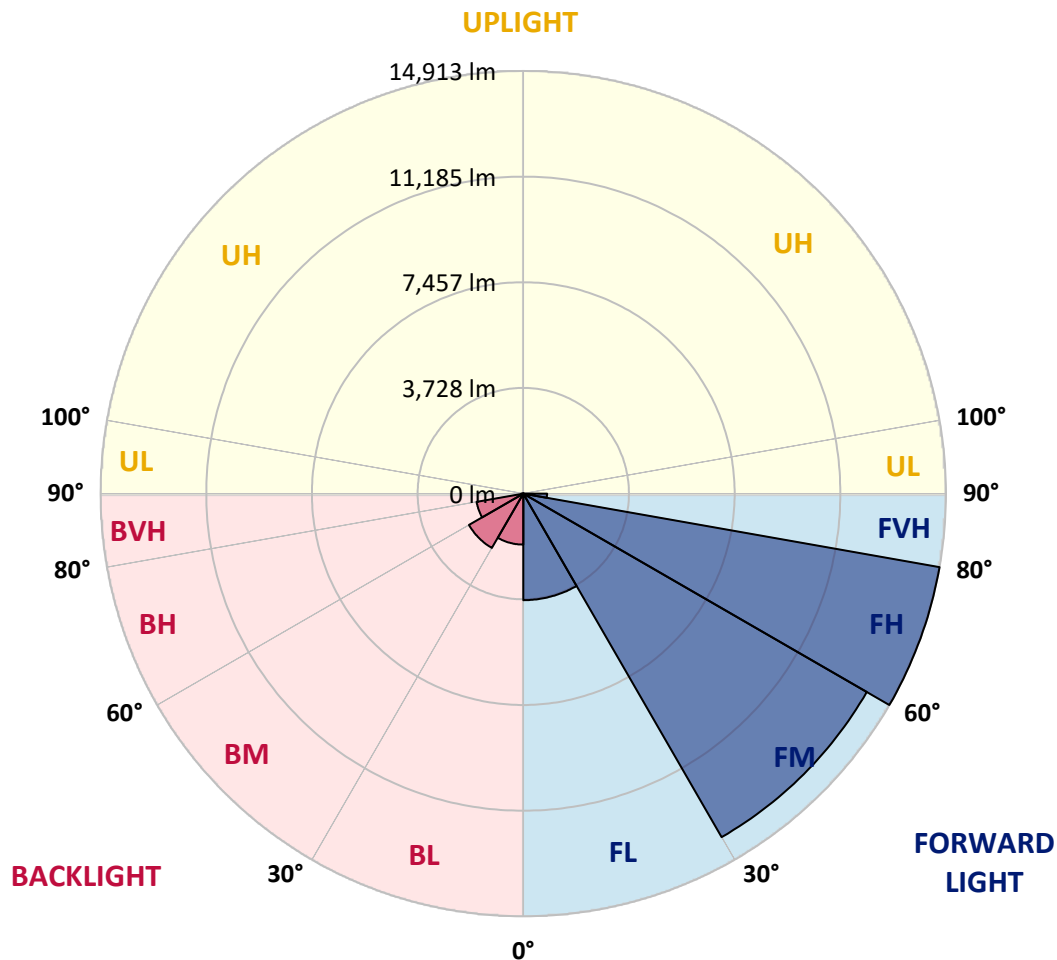
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3760.1	9.6			
FM	(30°-60°)	13994.1	35.6			
FH	(60°-80°)	14913.4	38.0			G5
FVH	(80°-90°)	838.8	2.1			G5
BL	(0°-30°)	1798.3	4.6	B3/2500		
BM	(30°-60°)	2212.6	5.6	B2/2500		
BH	(60°-80°)	1673.0	4.3	B3/2500		G3/2500
BVH	(80°-90°)	69.6	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	10849.2	10849.2	10849.2	10849.2	10849.2	10849.2	10849.2	10849.2	10849.2	10849.2	10849.2
2.5°	11252.0	11282.7	11273.9	11263.0	11245.5	11197.3	11118.5	11105.3	11055.0	10947.7	10814.1
5°	11079.1	11105.3	11107.5	11122.9	11144.8	11136.0	11079.1	11072.5	10998.1	10853.5	10630.2
7.5°	10485.7	10520.7	10597.4	10682.8	10759.4	10831.6	10849.2	10860.1	10814.1	10647.7	10350.0
10°	9817.9	9852.9	9888.0	10015.0	10203.3	10382.8	10531.7	10551.4	10562.3	10409.1	10045.6
12.5°	9077.8	9150.1	9224.5	9412.8	9664.6	9947.1	10209.8	10251.4	10325.9	10209.8	9782.9
15°	8449.4	8523.9	8631.2	8799.8	9104.1	9511.4	9881.4	9949.3	10096.0	10036.8	9537.6
17.5°	8013.7	8040.0	8114.4	8307.1	8635.5	9064.7	9559.5	9695.3	9929.6	9914.2	9327.4
20°	7670.0	7702.8	7748.8	7867.0	8208.6	8661.8	9259.6	9434.7	9752.2	9804.8	9119.4
22.5°	7525.4	7549.5	7543.0	7606.5	7838.5	8294.0	8955.2	9163.2	9594.6	9730.3	8926.8
25°	7534.2	7556.1	7523.3	7507.9	7645.9	7969.9	8637.7	8902.7	9467.6	9680.0	8751.6
27.5°	7680.9	7696.2	7634.9	7573.6	7584.6	7768.5	8375.0	8668.4	9360.3	9701.8	8604.9
30°	7878.0	7906.4	7867.0	7792.6	7711.6	7720.3	8206.4	8495.4	9309.9	9778.5	8534.8
32.5°	8131.9	8158.2	8140.7	8081.6	7976.5	7860.4	8164.8	8431.9	9314.3	9933.9	8519.5
35°	8399.1	8451.6	8480.1	8475.7	8390.3	8188.9	8329.0	8550.1	9419.4	10194.5	8609.3
37.5°	8701.2	8745.0	8867.6	8946.5	8867.6	8633.4	8699.0	8852.3	9651.5	10571.1	8806.3
40°	8994.6	9060.3	9239.9	9485.1	9454.4	9248.6	9263.9	9364.7	10060.9	11131.6	9191.7
42.5°	9301.2	9380.0	9693.1	10056.6	10128.8	9969.0	10010.6	10100.3	10643.3	11908.9	9852.9
45°	9695.3	9789.4	10174.8	10628.0	10912.7	10814.1	10932.4	10976.2	11422.8	12920.5	10724.4
47.5°	10203.3	10312.7	10787.9	11352.8	11755.6	11845.4	12051.2	12024.9	12388.4	14118.1	11854.2
50°	11059.4	11120.7	11569.5	12145.4	12699.3	13104.4	13327.7	13369.3	13586.1	15283.0	13117.5
52.5°	12077.5	12132.2	12456.3	12959.9	13654.0	14512.3	15064.0	14928.3	14980.8	16701.8	14595.5
55°	13222.6	13314.6	13520.4	13855.4	14755.3	16018.7	17126.6	17159.4	16577.0	18059.3	16012.1
57.5°	14109.4	14264.8	14617.4	15094.7	16235.4	17693.7	19182.6	19204.4	18460.0	19508.8	17575.4
60°	13662.7	13846.6	14652.4	15815.0	18177.6	20616.7	21639.2	21514.4	20292.6	21159.7	19482.5
62.5°	11735.9	11768.8	12940.2	14757.5	18775.3	24527.2	25295.7	24768.1	22738.4	23252.9	21420.3
65°	7595.5	7810.1	8738.4	11284.9	16811.3	26697.0	31702.3	30482.8	26167.2	25628.6	23042.7
67.5°	4795.1	4740.4	5125.7	6443.8	11563.0	24785.6	37169.6	36976.9	30651.4	27128.4	22655.2
69°	3976.2	4037.5	4168.9	4939.6	7956.8	21161.9	37815.5	39146.8	32825.6	27010.2	21247.3
70°	3606.2	3634.6	3772.6	4379.1	6139.5	17724.3	36755.8	39087.6	33679.5	26515.3	20227.0
72.5°	2861.7	2859.5	3096.0	3643.4	4589.3	10117.9	30180.6	33935.7	32724.8	24211.9	16712.8
75°	2174.2	2209.2	2469.8	3082.9	4228.0	5528.6	21061.2	26134.3	26136.5	19123.4	10428.8
77.5°	1567.7	1589.6	1894.0	2588.0	3982.8	4482.0	14028.4	18744.6	17621.4	8762.5	3277.7
80°	1026.9	1040.0	1272.1	2049.4	3590.8	4228.0	8318.1	11473.2	8311.5	2325.3	1083.8
82.5°	562.7	628.4	777.3	1326.9	2881.4	3906.1	5055.6	5806.7	3117.9	1035.7	564.9
85°	282.5	300.0	437.9	775.1	1883.0	3231.8	3520.8	3330.3	1609.3	514.5	293.4
87.5°	83.2	105.1	181.7	300.0	764.1	1683.8	1959.6	1758.2	619.6	186.1	61.3
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°	10849.2	10849.2	10849.2	10849.2	10849.2	10849.2	10849.2	10849.2	10849.2	10849.2	10849.2
2.5°	10759.4	10720.0	10544.8	10387.2	10242.7	10089.4	9960.2	9846.4	9857.3	9859.5	9743.4
5°	10514.2	10424.4	10091.6	9780.7	9517.9	9185.1	8900.5	8716.6	8624.6	8502.0	8545.8
7.5°	10181.4	10008.4	9546.4	9029.7	8545.8	8114.4	7645.9	7324.0	7118.2	6918.9	6945.2
10°	9837.6	9559.5	8887.3	8204.2	7578.0	6888.3	6290.5	5778.2	5397.2	5254.9	5160.7
12.5°	9485.1	9119.4	8265.5	7356.9	6492.0	5666.5	4819.2	4269.6	3849.2	3625.9	3654.3
15°	9163.2	8718.7	7617.4	6509.5	5386.3	4403.2	3558.0	3034.7	2741.3	2680.0	2715.0
17.5°	8865.4	8283.0	7010.9	5686.2	4374.7	3301.8	2673.4	2377.8	2259.6	2226.8	2224.6
20°	8558.9	7913.0	6330.0	4806.0	3409.1	2559.6	2193.9	2056.0	2034.1	2047.2	2049.4
22.5°	8248.0	7455.4	5629.3	3932.4	2715.0	2093.2	1918.0	1880.8	1898.3	1929.0	1933.4
25°	7961.2	7052.5	4954.9	3166.1	2167.6	1839.2	1753.8	1753.8	1793.2	1839.2	1841.4
27.5°	7724.7	6662.8	4282.7	2513.6	1815.1	1655.3	1626.8	1642.2	1696.9	1731.9	1734.1
30°	7529.8	6299.3	3647.8	2014.4	1596.2	1508.6	1502.0	1528.3	1567.7	1600.6	1602.7
32.5°	7383.1	5979.6	3054.4	1692.5	1445.1	1396.9	1394.7	1414.4	1436.3	1445.1	1453.9
35°	7326.2	5714.7	2511.4	1488.9	1344.4	1313.7	1313.7	1311.5	1320.3	1324.7	1329.1
37.5°	7372.2	5511.1	2091.0	1357.5	1269.9	1248.0	1234.9	1221.8	1217.4	1217.4	1219.6
40°	7567.0	5403.8	1777.9	1272.1	1217.4	1184.5	1160.5	1145.1	1129.8	1134.2	1138.6
42.5°	7980.9	5423.5	1565.5	1215.2	1171.4	1125.4	1090.4	1072.9	1061.9	1075.1	1072.9
45°	8639.9	5620.5	1429.8	1175.8	1125.4	1066.3	1033.5	1015.9	1015.9	1035.7	1042.2
47.5°	9561.7	5997.1	1357.5	1145.1	1090.4	1020.3	987.5	974.3	978.7	1011.6	1013.8
50°	10687.1	6651.8	1344.4	1129.8	1072.9	987.5	950.3	937.1	948.1	983.1	987.5
52.5°	11928.6	7494.8	1407.9	1132.0	1057.5	967.8	919.6	899.9	910.8	939.3	948.1
55°	13400.0	8550.1	1572.1	1140.7	1035.7	956.8	897.7	853.9	867.1	886.8	889.0
57.5°	14902.0	9881.4	1861.1	1142.9	1018.1	937.1	860.5	803.6	803.6	816.7	823.3
60°	16736.8	11330.9	2242.1	1145.1	1020.3	908.7	810.1	746.6	737.9	744.4	746.6
62.5°	18558.5	12543.9	2305.6	1138.6	1042.2	880.2	755.4	689.7	674.4	672.2	667.8
65°	19362.1	12318.3	1889.6	1107.9	1066.3	862.7	711.6	635.0	608.7	599.9	599.9
67.5°	18052.7	10420.0	1421.0	1066.3	1051.0	845.2	670.0	589.0	558.3	540.8	540.8
69°	16822.2	9268.3	1276.5	1037.8	1011.6	816.7	643.7	564.9	527.7	508.0	501.4
70°	15872.0	8475.7	1215.2	1013.8	974.3	783.9	624.0	547.4	505.8	483.9	479.5
72.5°	12666.5	6649.6	1064.1	921.8	829.8	659.1	554.0	492.6	453.2	429.1	422.6
75°	7299.9	3604.0	882.4	801.4	667.8	512.4	468.6	429.1	398.5	376.6	370.0
77.5°	2246.5	1392.5	639.3	632.8	490.5	396.3	374.4	359.1	337.2	313.1	308.7
80°	945.9	709.4	433.5	427.0	326.2	275.9	269.3	267.1	258.4	238.7	232.1
82.5°	518.9	400.7	302.2	262.7	197.1	159.8	166.4	168.6	162.0	142.3	129.2
85°	254.0	219.0	146.7	118.2	89.8	56.9	54.7	65.7	61.3	43.8	48.2
87.5°	50.4	61.3	39.4	17.5	8.8	0.0	0.0	0.0	0.0	0.0	0.0
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)