

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: P456606

Luminaire Tested: **GALN-SA7D-827-U-SL2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456606
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-827-U-SL2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 2700K, 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: 39538 lumens
Efficiency: N/A
Efficacy: 91.3 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

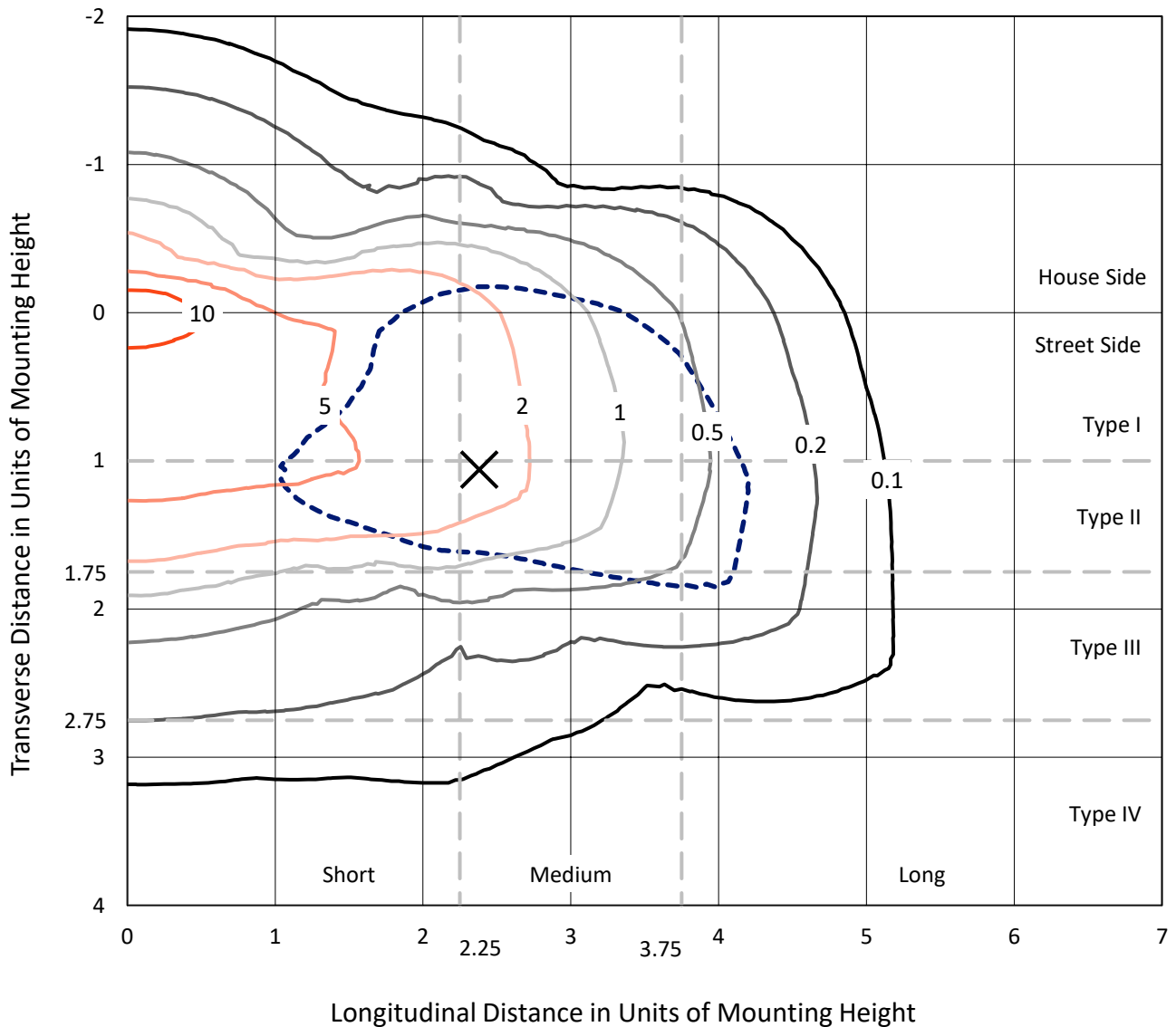
Input Watts (W): 433
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

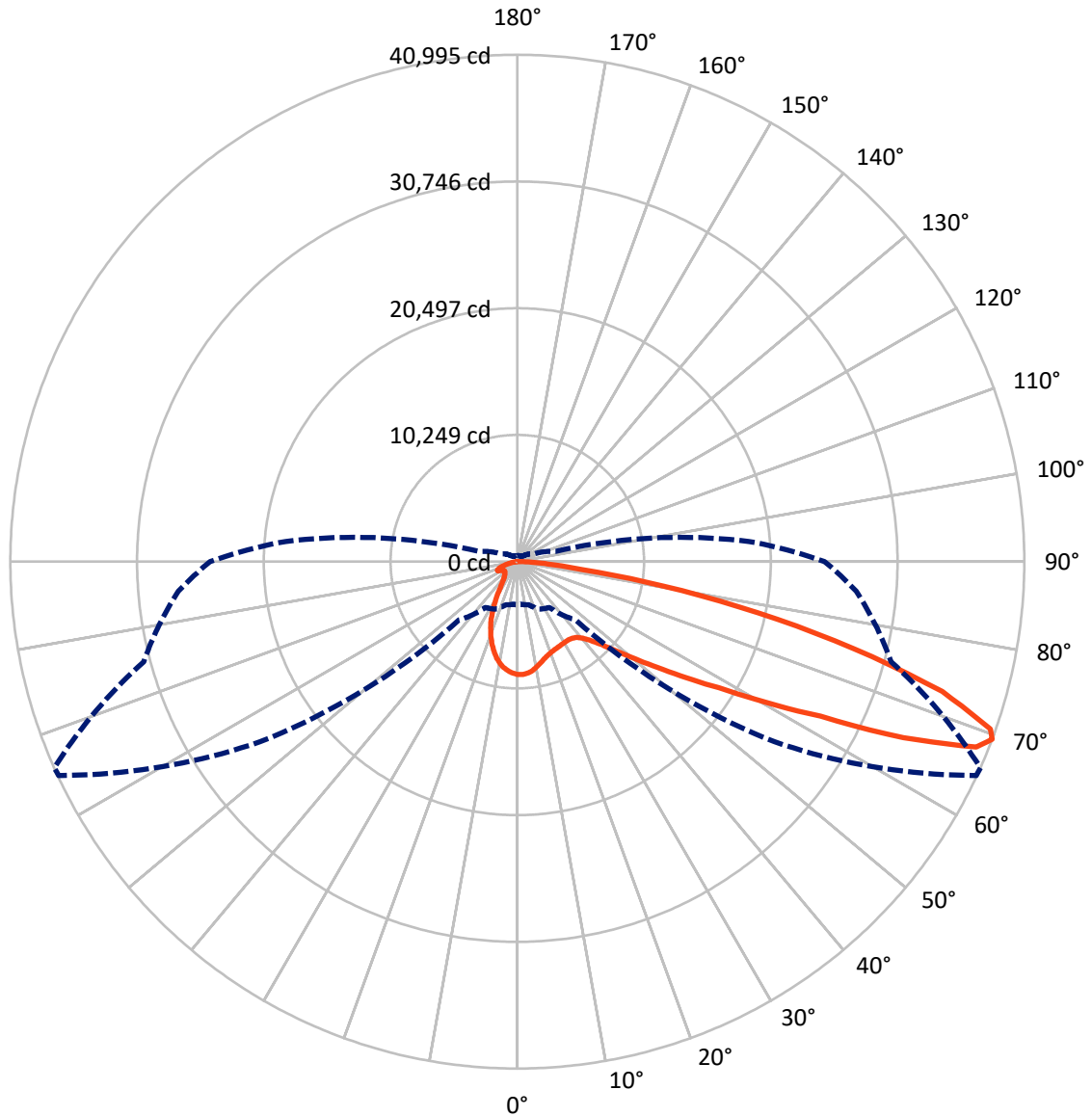
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.6 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	7435.6	0.0	7435.6
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	32102.4	0.0	32102.4
	% Fixture	81.2	0.0	81.2
Total	Lumens	39538.0	0.0	39538.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	792.9	2.0
10°-20°	1880.6	4.8
20°-30°	2560.2	6.5
30°-40°	3440.4	8.7
40°-50°	5137.1	13.0
50°-60°	8171.4	20.7
60°-70°	10050.4	25.4
70°-80°	6539.2	16.5
80°-90°	965.6	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°	39538.0	100.0
0°-180°	39538.0	100.0

Coefficient of Utilization



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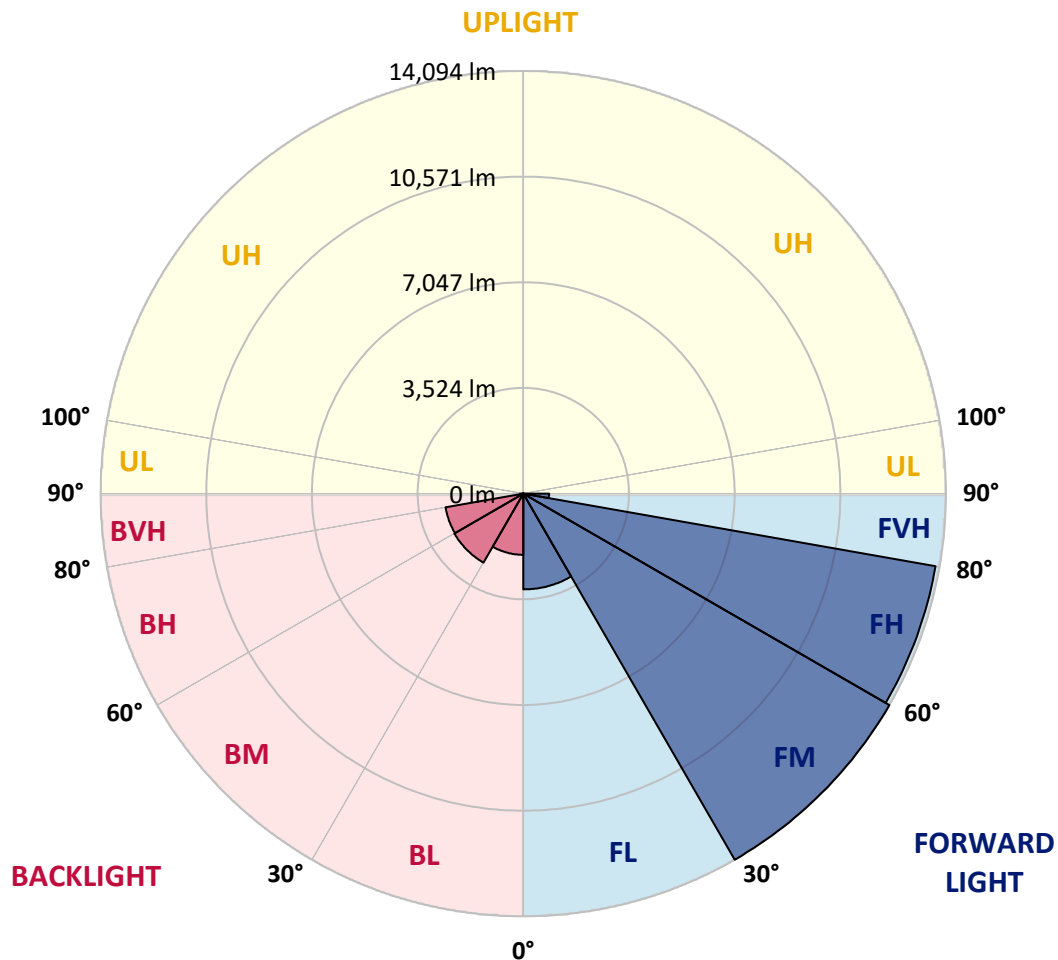
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3192.6	8.1			
FM	(30°-60°)	14094.1	35.6			
FH	(60°-80°)	13957.1	35.3			G5
FVH	(80°-90°)	858.5	2.2			G5
BL	(0°-30°)	2041.1	5.2	B3/2500		
BM	(30°-60°)	2654.8	6.7	B3/5000		
BH	(60°-80°)	2632.5	6.7	B4/5000		G4/5000
BVH	(80°-90°)	107.1	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°	9130.4	9130.4	9130.4	9130.4	9130.4	9130.4	9130.4	9130.4	9130.4	9130.4	9130.4
2.5°	8810.7	8845.8	8885.2	8929.0	9012.2	9058.2	9091.0	9128.2	9132.6	9152.3	9137.0
5°	8160.5	8202.1	8261.2	8344.4	8469.2	8664.0	8865.5	9029.7	9049.4	9141.4	9167.6
7.5°	7617.4	7641.5	7689.7	7823.3	8000.6	8217.4	8510.8	8843.6	8891.8	9110.7	9187.4
10°	7175.2	7199.2	7256.2	7394.1	7569.3	7840.8	8162.6	8600.6	8640.0	9016.6	9191.7
12.5°	6844.5	6866.4	6927.7	7063.5	7264.9	7518.9	7873.6	8337.8	8394.7	8891.8	9150.1
15°	6592.7	6634.3	6684.7	6796.4	7008.7	7254.0	7597.7	8097.0	8142.9	8760.4	9121.7
17.5°	6485.4	6505.2	6540.2	6643.1	6798.6	7039.4	7385.4	7908.7	7963.4	8668.4	9115.1
20°	6489.8	6509.5	6516.1	6573.0	6684.7	6892.7	7234.3	7759.8	7825.5	8587.4	9126.0
22.5°	6638.7	6640.9	6616.8	6597.1	6640.9	6813.9	7127.0	7648.1	7724.7	8552.4	9134.8
25°	6868.6	6908.0	6873.0	6781.0	6700.0	6783.2	7085.4	7586.8	7659.0	8502.0	9123.9
27.5°	7240.8	7247.4	7218.9	7094.1	6883.9	6822.6	7067.9	7540.8	7602.1	8464.8	9069.1
30°	7740.1	7720.4	7694.1	7556.1	7225.5	6973.7	7105.1	7499.2	7562.7	8410.1	9003.4
32.5°	8245.8	8307.2	8283.1	8121.0	7691.9	7267.1	7225.5	7494.8	7547.4	8368.5	8931.2
35°	8782.3	8810.7	8924.6	8841.4	8401.3	7742.2	7451.0	7562.7	7604.3	8370.6	8880.8
37.5°	9202.7	9279.3	9546.4	9618.7	9204.9	8370.6	7816.7	7755.4	7772.9	8477.9	8900.5
40°	9710.7	9842.0	10185.8	10481.4	10209.9	9187.4	8438.5	8112.3	8134.2	8736.3	9029.7
42.5°	10354.4	10446.3	10908.3	11309.0	11265.2	10266.8	9191.7	8696.9	8707.8	9250.8	9391.0
45°	11107.6	11239.0	11757.9	12360.0	12462.9	11488.6	10279.9	9581.5	9574.9	10050.0	10065.4
47.5°	12071.0	12152.0	12666.5	13323.4	13739.4	13023.4	11600.2	10851.4	10781.3	11214.9	11090.1
50°	12957.8	13084.7	13474.5	14192.7	15228.3	14821.1	13336.5	12498.0	12333.7	12738.8	12528.6
52.5°	13330.0	13463.5	13792.0	14683.1	16504.8	17146.4	15541.4	14462.0	14188.3	14499.2	14422.6
55°	12684.1	12857.0	13163.6	14247.4	17065.4	19828.6	18514.8	16732.5	16533.3	16399.7	16421.6
57.5°	10947.7	11112.0	11525.8	12721.3	16395.3	21775.1	22760.4	19651.2	19224.2	18609.0	18714.1
60°	8333.4	8436.3	8650.9	9975.6	14409.4	22280.9	27581.8	23340.6	23069.1	20809.5	20883.9
62.5°	5918.4	6034.4	6183.3	6844.5	10549.3	20855.5	31356.5	28492.6	27522.6	23088.8	23016.5
65°	4806.1	4727.2	4906.8	5215.5	6189.9	16163.3	32206.1	35643.7	34308.1	26090.7	25087.9
67.5°	3952.1	3868.9	4046.3	4595.9	4707.5	9382.2	29145.1	40285.5	40018.4	29355.3	27192.0
69°	3498.9	3455.1	3610.6	4236.8	4519.2	6662.8	25390.0	40931.4	40994.9	31279.9	27516.1
70°	3153.0	3170.5	3321.5	4055.0	4433.8	5493.6	21700.6	40040.3	40578.9	32241.1	27165.7
72.5°	2320.9	2358.1	2568.3	3358.8	4352.8	4661.6	12914.0	34973.7	35926.1	32298.0	24851.4
75°	1622.5	1604.9	1791.1	2528.9	4112.0	4620.0	7584.6	27047.5	28127.0	27916.8	20881.7
77.5°	1061.9	1090.4	1239.3	1786.7	3459.5	4584.9	4944.0	19189.2	19889.9	18670.3	12351.3
80°	748.8	746.6	829.8	1219.6	2566.2	4405.4	4048.5	12095.1	11917.7	7337.2	3663.1
82.5°	429.2	459.8	556.1	858.3	1716.6	3877.7	3724.4	5784.8	5281.2	2091.0	1237.1
85°	238.7	249.6	330.6	518.9	1002.8	2920.9	3251.5	2631.8	2482.9	873.6	532.1
87.5°	76.6	83.2	137.9	262.7	455.4	1379.4	1841.4	1215.2	1121.0	315.3	214.6
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°	9130.4	9130.4	9130.4	9130.4	9130.4	9130.4	9130.4	9130.4	9130.4	9130.4	9130.4
2.5°	9143.6	9169.8	9099.8	9031.9	8970.6	8885.2	8808.6	8745.1	8701.3	8694.7	8672.8
5°	9174.2	9176.4	9042.8	8863.3	8688.1	8495.5	8296.2	8153.9	8020.3	7945.9	7908.7
7.5°	9196.1	9176.4	8935.6	8644.3	8307.2	7956.8	7606.5	7326.2	7109.5	7024.1	7056.9
10°	9187.4	9126.0	8773.5	8307.2	7816.7	7293.4	6789.8	6395.7	6034.4	5848.3	5852.7
12.5°	9139.2	9038.5	8532.7	7928.4	7208.0	6507.3	5736.6	5204.6	4786.4	4538.9	4462.3
15°	9097.6	8922.4	8250.2	7413.8	6518.3	5517.7	4578.3	3921.5	3571.2	3376.3	3374.1
17.5°	9053.8	8810.7	7941.5	6868.6	5725.7	4438.2	3452.9	2951.5	2787.3	2807.0	2774.2
20°	9007.8	8679.4	7619.6	6262.1	4760.1	3310.6	2585.9	2382.2	2428.2	2518.0	2531.1
22.5°	8955.3	8539.2	7273.7	5594.3	3744.1	2491.7	2097.6	2066.9	2185.2	2325.3	2345.0
25°	8874.2	8364.1	6838.0	4895.8	2888.0	2007.8	1837.0	1858.9	1975.0	2093.2	2106.3
27.5°	8760.4	8147.3	6397.9	4024.4	2169.8	1723.2	1679.4	1707.8	1764.8	1837.0	1854.5
30°	8607.1	7902.1	5892.1	3271.2	1738.5	1580.9	1563.3	1578.7	1611.5	1642.2	1650.9
32.5°	8453.9	7665.6	5381.9	2504.8	1550.2	1486.7	1469.2	1469.2	1469.2	1473.6	1475.8
35°	8311.5	7442.3	4834.5	1950.9	1451.7	1412.3	1388.2	1361.9	1357.5	1342.2	1342.2
37.5°	8232.7	7238.7	4252.1	1633.4	1379.4	1351.0	1318.1	1274.3	1250.2	1252.4	1248.0
40°	8248.0	7105.1	3722.2	1453.9	1320.3	1289.6	1239.3	1188.9	1173.6	1173.6	1169.2
42.5°	8421.0	7061.3	3214.3	1359.7	1263.4	1228.3	1164.8	1118.9	1110.1	1107.9	1112.3
45°	8819.5	7168.6	2758.8	1298.4	1215.2	1162.7	1099.2	1057.6	1048.8	1048.8	1046.6
47.5°	9596.8	7516.7	2432.6	1259.0	1180.2	1112.3	1046.6	1005.0	989.7	985.3	985.3
50°	10805.4	8272.1	2189.5	1224.0	1136.4	1066.3	998.4	950.3	926.2	924.0	921.8
52.5°	12484.8	9450.1	2095.4	1197.7	1088.2	1018.1	943.7	897.7	867.1	860.5	856.1
55°	14448.8	11094.4	2224.6	1178.0	1037.8	963.4	886.8	838.6	810.1	797.0	794.8
57.5°	16723.8	13069.4	2715.0	1151.7	991.9	904.3	829.8	781.7	751.0	735.7	731.3
60°	18766.6	15099.1	3571.2	1136.4	952.5	840.8	764.2	720.4	691.9	676.6	674.4
62.5°	21010.9	17034.7	4593.7	1178.0	934.9	779.5	702.8	663.4	639.3	624.0	624.0
65°	23408.5	18972.4	5270.2	1318.1	961.2	731.3	637.2	604.3	582.4	571.5	569.3
67.5°	25024.4	19642.5	4341.9	1462.6	1026.9	678.8	573.7	547.4	534.3	523.3	523.3
69°	24849.2	18795.1	3203.3	1499.8	1046.6	652.5	538.6	518.9	501.4	497.0	492.6
70°	24295.2	17829.5	2684.4	1475.8	1031.3	628.4	516.7	492.6	477.3	472.9	470.8
72.5°	21639.3	15462.6	1999.1	1283.1	878.0	545.2	457.6	435.7	422.6	416.0	416.0
75°	17978.4	12638.1	1561.1	1020.3	687.5	459.8	391.9	374.4	363.5	359.1	356.9
77.5°	10076.3	7056.9	1121.0	799.2	521.1	372.2	328.4	313.1	302.2	297.8	297.8
80°	2807.0	2016.6	659.1	527.7	354.7	282.5	260.6	249.6	234.3	223.3	229.9
82.5°	1057.6	873.6	376.6	317.5	225.5	188.3	181.7	173.0	166.4	151.1	151.1
85°	514.5	424.8	240.9	168.6	124.8	98.5	94.2	89.8	85.4	74.4	76.6
87.5°	177.4	188.3	105.1	61.3	37.2	24.1	19.7	10.9	10.9	10.9	10.9
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)