

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: P459539

Luminaire Tested: **GALN-SA9D-735-U-SL4**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459539
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA9D-735-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 63947 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

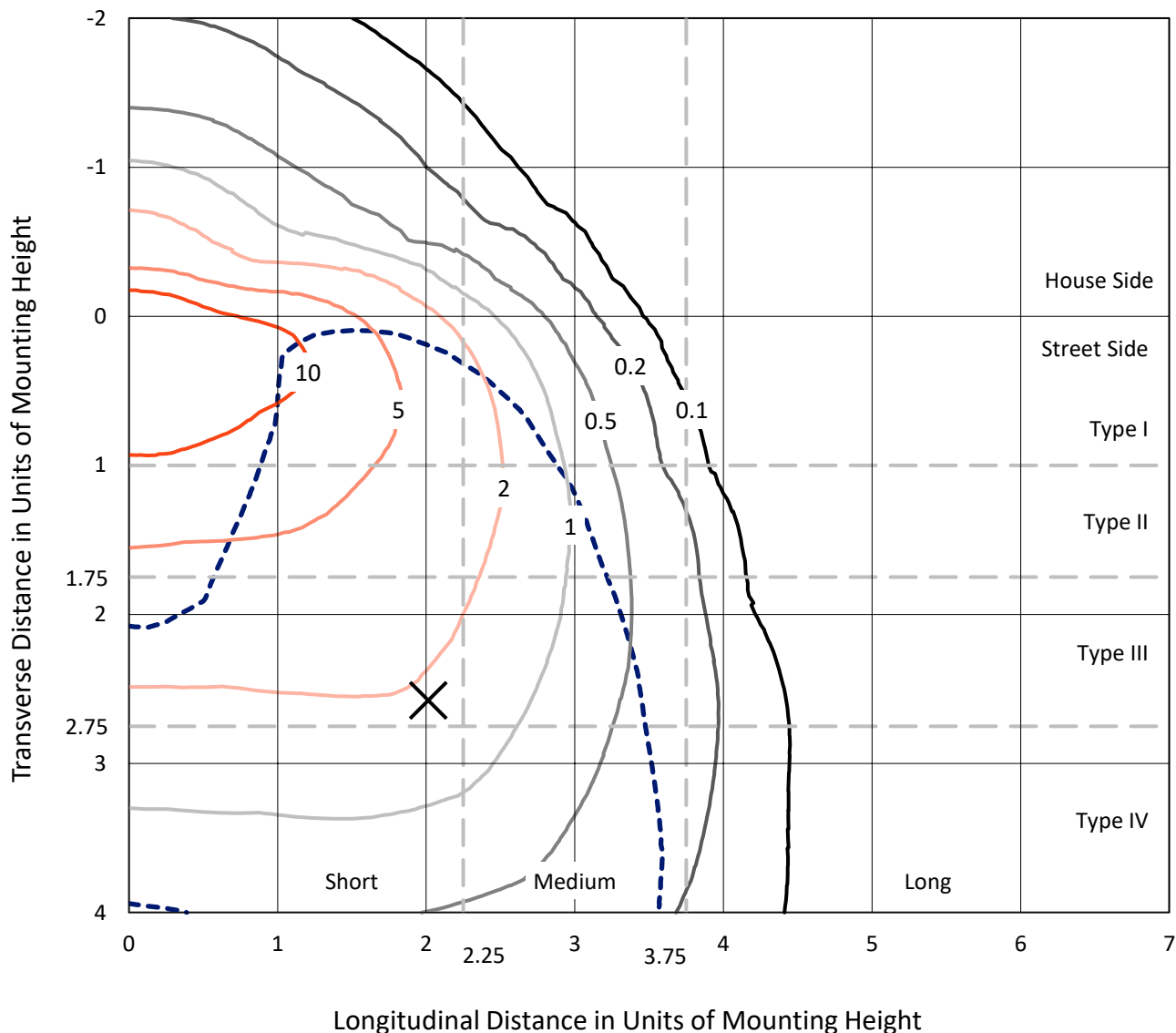
Input Watts (W): 552
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

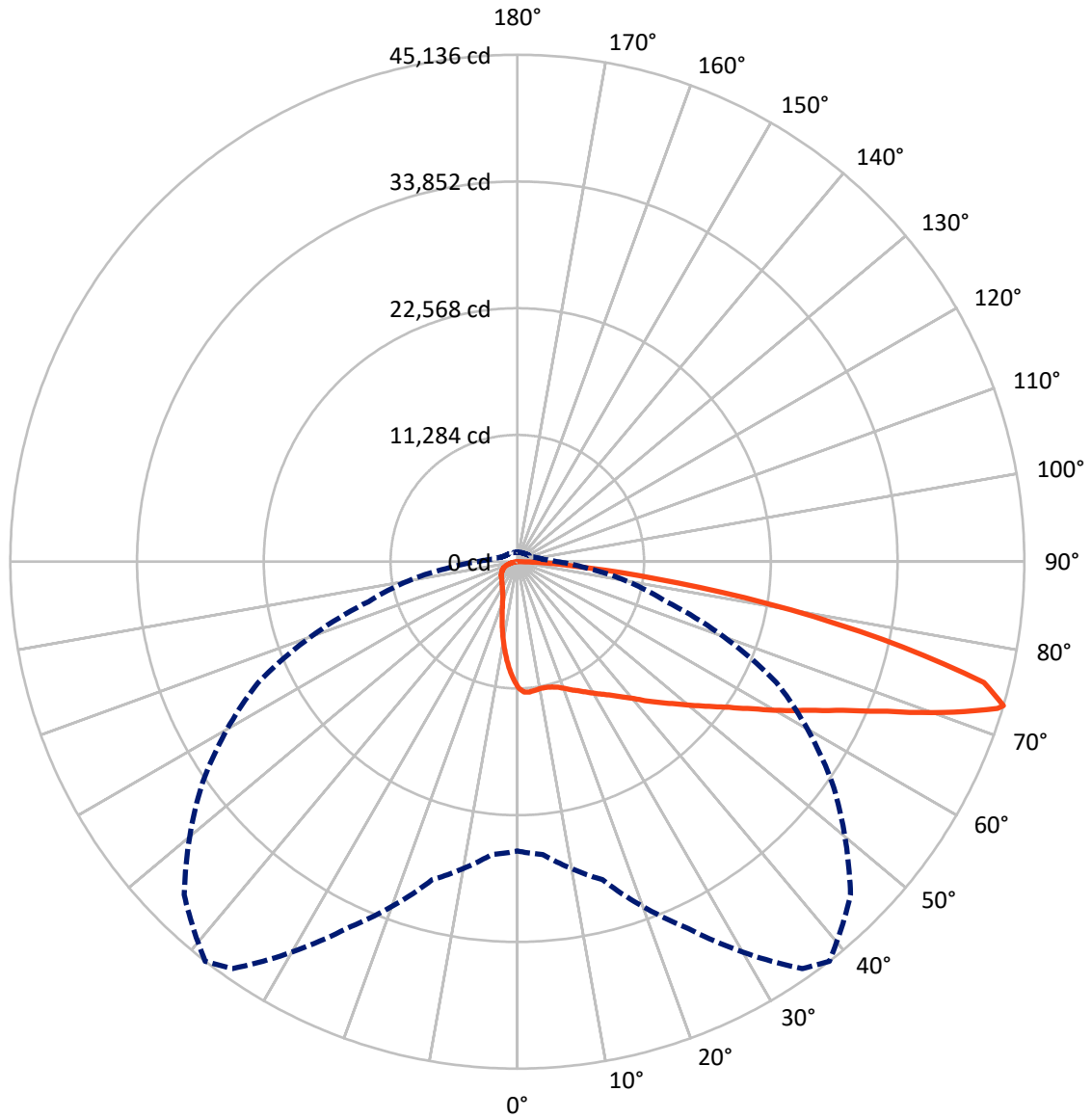
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 18.3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8596.4	0.0	8596.4
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	55350.6	0.0	55350.6
	% Fixture	86.6	0.0	86.6
Total	Lumens	63947.0	0.0	63947.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	980.6	1.5
10°-20°	2514.7	3.9
20°-30°	3915.8	6.1
30°-40°	5743.6	9.0
40°-50°	8520.0	13.3
50°-60°	12071.2	18.9
60°-70°	15312.7	23.9
70°-80°	12746.6	19.9
80°-90°	2141.6	3.3
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°	63947.0	100.0
0°-180°	63947.0	100.0

Coefficient of Utilization



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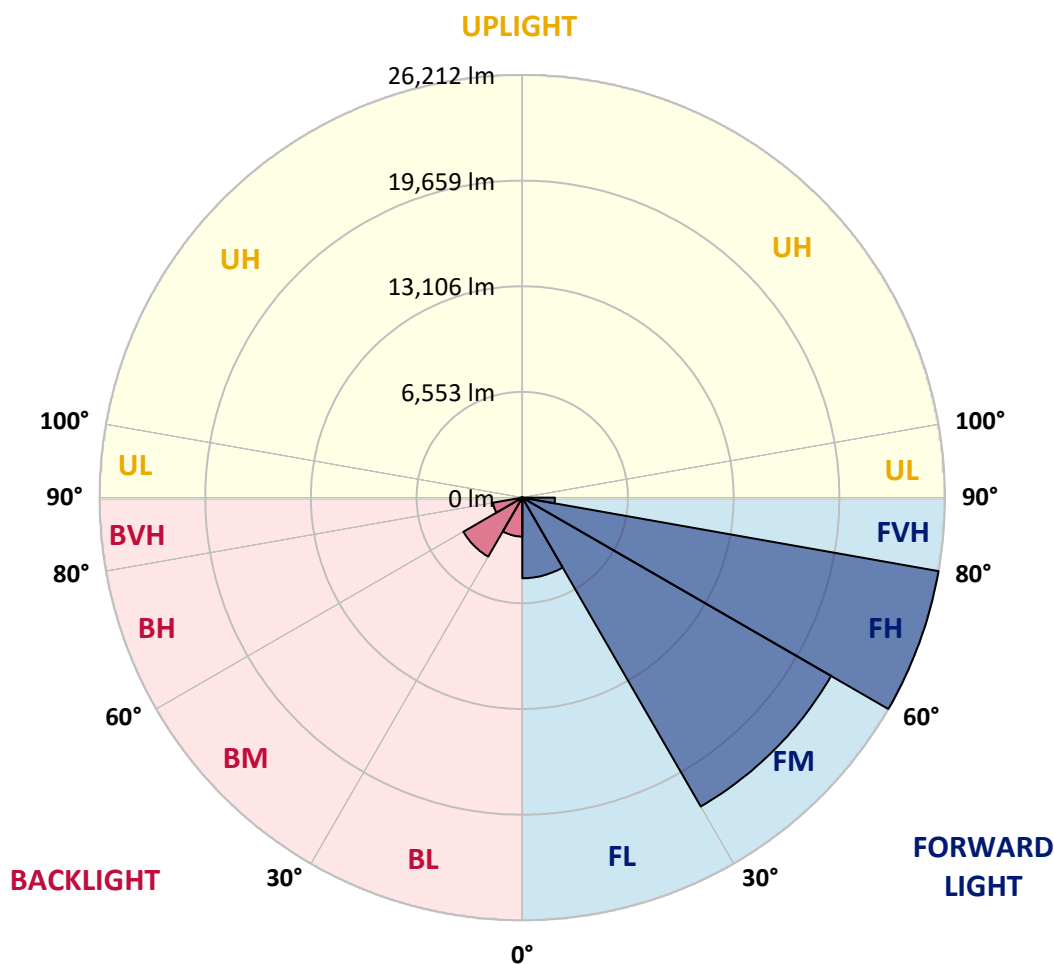
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4998.9	7.8			
FM	(30°-60°)	22114.6	34.6			
FH	(60°-80°)	26211.6	41.0			G5
FVH	(80°-90°)	2025.5	3.2			G5
BL	(0°-30°)	2412.2	3.8	B3/2500		
BM	(30°-60°)	4220.3	6.6	B3/5000		
BH	(60°-80°)	1847.7	2.9	B3/2500		G3/2500
BVH	(80°-90°)	116.1	0.2			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	11234.4	11234.4	11234.4	11234.4	11234.4	11234.4	11234.4	11234.4	11234.4	11234.4	11234.4
2.5°	11685.8	11743.6	11714.7	11675.0	11649.7	11624.4	11588.3	11483.6	11400.5	11310.2	11169.4
5°	11772.5	11808.6	11783.3	11732.7	11675.0	11649.7	11581.1	11443.9	11310.2	11158.6	10949.1
7.5°	11721.9	11736.4	11707.5	11646.1	11595.5	11548.6	11469.1	11317.5	11155.0	10970.8	10696.3
10°	11541.4	11595.5	11595.5	11545.0	11494.4	11469.1	11389.7	11245.2	11097.2	10887.7	10562.7
12.5°	11393.3	11451.1	11498.0	11483.6	11480.0	11480.0	11418.6	11310.2	11136.9	10938.3	10551.9
15°	11292.2	11360.8	11461.9	11519.7	11555.8	11566.6	11541.4	11447.5	11270.5	11039.4	10595.2
17.5°	11270.5	11353.6	11537.7	11664.1	11758.0	11754.4	11747.2	11617.2	11422.2	11183.8	10649.4
20°	11368.0	11476.4	11732.7	11931.4	12068.6	12043.3	12003.6	11833.9	11606.4	11339.1	10699.9
22.5°	11660.5	11772.5	12054.1	12270.8	12404.4	12404.4	12285.3	12061.4	11819.4	11519.7	10768.6
25°	12079.4	12202.2	12501.9	12722.2	12783.6	12736.7	12617.5	12346.6	12068.6	11779.7	10913.0
27.5°	12592.2	12740.3	13018.3	13202.5	13184.4	13148.3	13025.6	12678.9	12400.8	12137.2	11158.6
30°	13231.4	13339.7	13628.6	13672.0	13607.0	13599.7	13426.4	13079.7	12819.7	12617.5	11508.9
32.5°	13834.5	13932.0	14163.1	14181.1	14065.6	14080.0	13917.5	13599.7	13451.7	13379.4	12097.5
35°	14473.6	14524.2	14722.8	14701.1	14625.3	14614.5	14549.5	14246.1	14293.1	14423.1	12931.7
37.5°	15008.1	15109.2	15221.2	15239.2	15235.6	15271.7	15315.0	15170.6	15441.4	15849.5	14025.9
40°	15499.2	15585.9	15752.0	15809.8	15950.6	16022.8	16170.9	16174.5	16799.2	17470.9	15372.8
42.5°	15831.4	15979.5	16290.1	16394.8	16737.9	16954.5	17174.8	17409.5	18315.9	19179.0	16961.7
45°	16120.3	16315.3	16831.7	17156.8	17622.6	17886.2	18352.1	18843.2	20146.8	21277.1	18575.9
47.5°	16557.3	16730.6	17322.9	17897.0	18601.2	18904.6	19601.5	20334.6	22039.1	23277.7	20121.5
50°	17164.0	17268.7	17871.8	18807.1	19706.2	20096.3	21017.1	22075.2	24061.3	25253.0	21479.3
52.5°	17940.4	17983.7	18464.0	19709.9	20894.3	21378.2	22598.8	23833.8	25830.8	26968.3	22555.5
55°	18857.6	18785.4	19161.0	20666.8	22252.1	22884.1	24195.0	25614.2	27820.6	28355.0	23339.1
57.5°	19764.0	19652.1	19951.8	21829.6	23927.7	24689.7	26217.2	27448.6	29597.3	29651.5	23888.0
60°	20724.6	20641.5	20999.1	23194.7	25982.5	26885.3	28297.3	29351.7	31316.2	30554.3	23974.7
62.5°	21710.5	21576.8	22086.0	24729.4	28297.3	29117.0	30485.6	31374.0	33002.6	30890.1	23140.5
65°	22667.4	22606.0	23393.3	26553.1	30933.4	31865.1	33194.0	33797.1	34353.2	30384.5	21071.3
67.5°	23685.8	23808.6	25065.3	28987.0	34371.3	35541.3	36974.9	36408.0	34739.6	27990.3	17745.4
70°	25238.6	25318.0	27260.9	32175.7	38802.2	40214.2	40907.5	37336.1	32876.3	23443.8	13339.7
72.5°	25906.7	26256.9	29221.7	35523.3	43836.2	44699.3	42229.2	35266.9	27387.2	15925.3	7009.3
73°	25758.6	26177.5	29312.0	36032.4	44229.8	45136.2	41947.6	34201.6	25458.9	13715.3	6009.0
75°	23913.3	24429.7	28138.4	35606.3	43464.3	42922.6	37419.1	29149.5	17203.7	6236.5	2737.3
77.5°	18868.5	19016.5	22295.5	28752.3	34226.8	33222.9	28004.8	18218.4	7027.4	2318.4	1552.8
80°	9464.9	10010.2	12566.9	16470.6	22887.7	22559.1	17676.8	8616.3	2928.7	1361.4	1029.2
82.5°	4553.7	4940.1	6121.0	8031.3	12646.4	12346.6	8753.5	4709.0	1859.8	794.5	606.7
85°	2932.3	3221.2	3896.5	3831.5	5200.1	4965.4	3932.6	3564.2	1101.4	415.3	422.5
87.5°	1935.6	2119.8	2542.3	2033.1	1892.3	1711.7	1737.0	2007.8	216.7	158.9	57.8
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°	11234.4	11234.4	11234.4	11234.4	11234.4	11234.4	11234.4	11234.4	11234.4	11234.4	11234.4
2.5°	11111.6	11064.7	10909.4	10757.7	10613.3	10476.1	10385.8	10266.6	10187.2	10208.8	10241.3
5°	10833.6	10728.8	10454.4	10187.2	9934.4	9634.6	9392.7	9197.7	9049.6	8995.5	8984.6
7.5°	10541.1	10364.1	9970.5	9511.9	9082.1	8710.2	8280.5	8067.4	7818.2	7731.6	7702.7
10°	10364.1	10125.8	9573.3	8934.1	8287.7	7670.2	7204.3	6825.1	6482.1	6417.1	6384.6
12.5°	10313.6	9999.4	9255.5	8432.1	7572.7	6814.3	6124.6	5626.2	5294.0	5218.2	5106.2
15°	10284.7	9894.7	8959.4	7926.6	6836.0	5911.5	5185.7	4604.3	4300.9	4098.7	4102.3
17.5°	10259.4	9775.5	8627.1	7374.0	6200.4	5135.1	4333.4	3809.8	3531.7	3423.4	3412.6
20°	10223.3	9634.6	8244.3	6792.6	5474.6	4427.3	3701.5	3311.5	3123.7	3033.4	3029.8
22.5°	10208.8	9497.4	7868.8	6200.4	4831.8	3882.0	3282.6	3008.1	2888.9	2827.6	2827.6
25°	10244.9	9399.9	7475.2	5637.1	4261.2	3416.2	2993.7	2805.9	2737.3	2704.8	2693.9
27.5°	10356.9	9356.6	7085.1	5073.7	3737.6	3098.4	2798.7	2668.7	2618.1	2592.8	2596.4
30°	10569.9	9353.0	6702.4	4517.6	3347.6	2856.4	2643.4	2553.1	2513.4	2498.9	2495.3
32.5°	10913.0	9432.4	6326.8	4059.0	3019.0	2654.2	2498.9	2433.9	2415.9	2405.1	2401.4
35°	11494.4	9656.3	5954.8	3640.1	2766.2	2473.7	2361.7	2329.2	2303.9	2314.8	2318.4
37.5°	12278.0	10042.7	5601.0	3311.5	2574.8	2340.0	2246.2	2217.3	2202.8	2213.7	2224.5
40°	13328.9	10598.8	5304.8	3047.8	2437.6	2228.1	2145.0	2119.8	2105.3	2123.4	2127.0
42.5°	14488.1	11241.6	5059.3	2842.0	2325.6	2134.2	2054.8	2025.9	2015.0	2025.9	2029.5
45°	15679.8	11989.1	4932.9	2693.9	2231.7	2065.6	1982.5	1950.0	1924.8	1917.5	1928.4
47.5°	16853.4	12639.2	4929.3	2603.7	2155.9	2004.2	1913.9	1877.8	1845.3	1827.3	1823.6
50°	17810.4	13155.6	5015.9	2563.9	2090.9	1935.6	1845.3	1809.2	1765.9	1729.8	1737.0
52.5°	18532.6	13491.4	5055.7	2545.9	2054.8	1863.4	1773.1	1740.6	1690.0	1643.1	1643.1
55°	18998.5	13570.8	4958.2	2527.8	2025.9	1787.5	1690.0	1661.1	1610.6	1563.6	1563.6
57.5°	19157.3	13325.3	4607.9	2484.5	1997.0	1722.5	1607.0	1581.7	1542.0	1495.0	1487.8
60°	18789.0	12494.7	3994.0	2354.5	1939.2	1653.9	1516.7	1505.9	1491.4	1451.7	1448.1
62.5°	17369.8	10732.4	3325.9	2184.8	1841.7	1581.7	1433.6	1451.7	1462.5	1440.9	1437.3
65°	15008.1	8713.8	2842.0	1950.0	1711.7	1480.6	1343.4	1390.3	1419.2	1419.2	1412.0
67.5°	12173.3	6691.5	2394.2	1747.8	1549.2	1343.4	1242.2	1278.4	1300.0	1292.8	1310.9
70°	8652.4	4532.0	1950.0	1516.7	1343.4	1188.1	1112.2	1112.2	1097.8	1090.6	1090.6
72.5°	4196.2	2589.2	1581.7	1267.5	1144.7	1014.7	953.4	928.1	899.2	895.6	877.5
73°	3506.5	2322.0	1509.5	1220.6	1097.8	989.5	920.9	881.1	863.1	848.6	845.0
75°	2134.2	1762.3	1260.3	1029.2	935.3	852.2	790.9	754.7	736.7	725.8	722.2
77.5°	1404.8	1314.5	978.6	787.2	715.0	664.5	639.2	603.1	592.2	577.8	577.8
80°	1047.2	1003.9	700.6	556.1	512.8	469.5	462.2	455.0	426.1	408.1	400.8
82.5°	675.3	715.0	476.7	372.0	325.0	288.9	292.5	303.3	274.5	249.2	241.9
85°	480.3	516.4	288.9	169.7	137.2	119.2	133.6	119.2	122.8	97.5	79.4
87.5°	79.4	137.2	50.6	21.7	10.8	7.2	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)