

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P638682

Luminaire Tested: GWS-SA4F-735-U-AFL-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638682
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-46)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4F-735-U-AFL-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (64) 3500K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25274.2 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G1

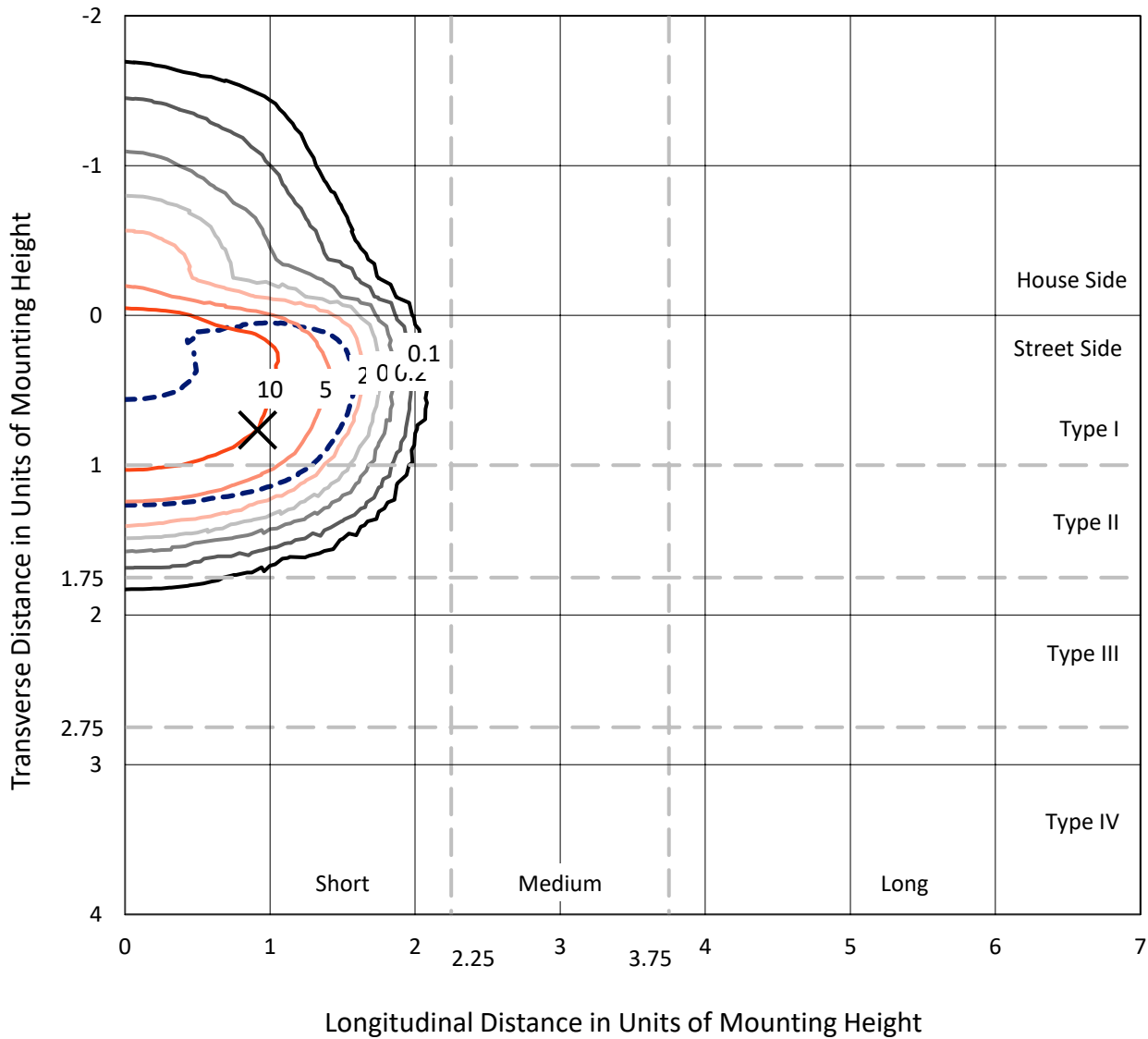
Input Watts (W): 225.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

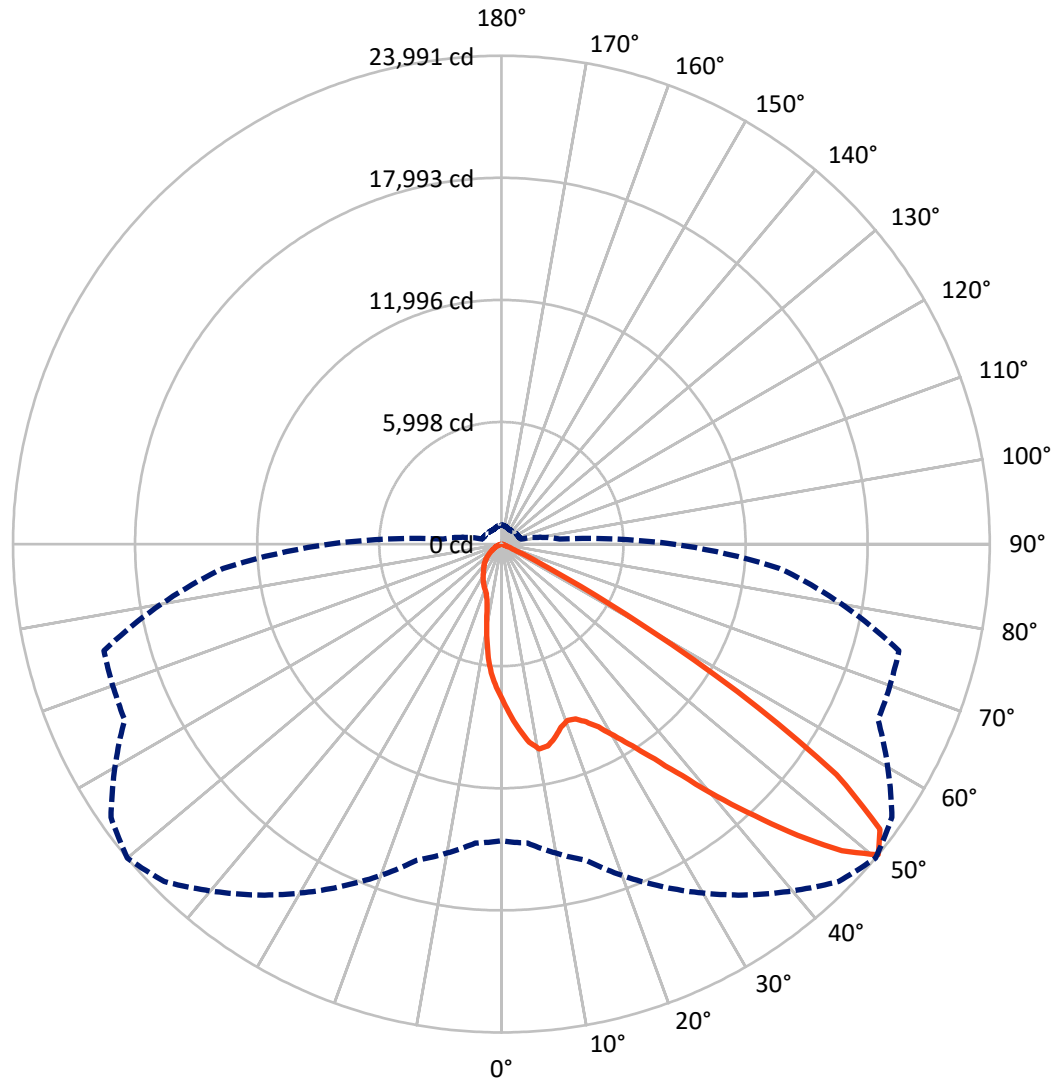
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 50-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

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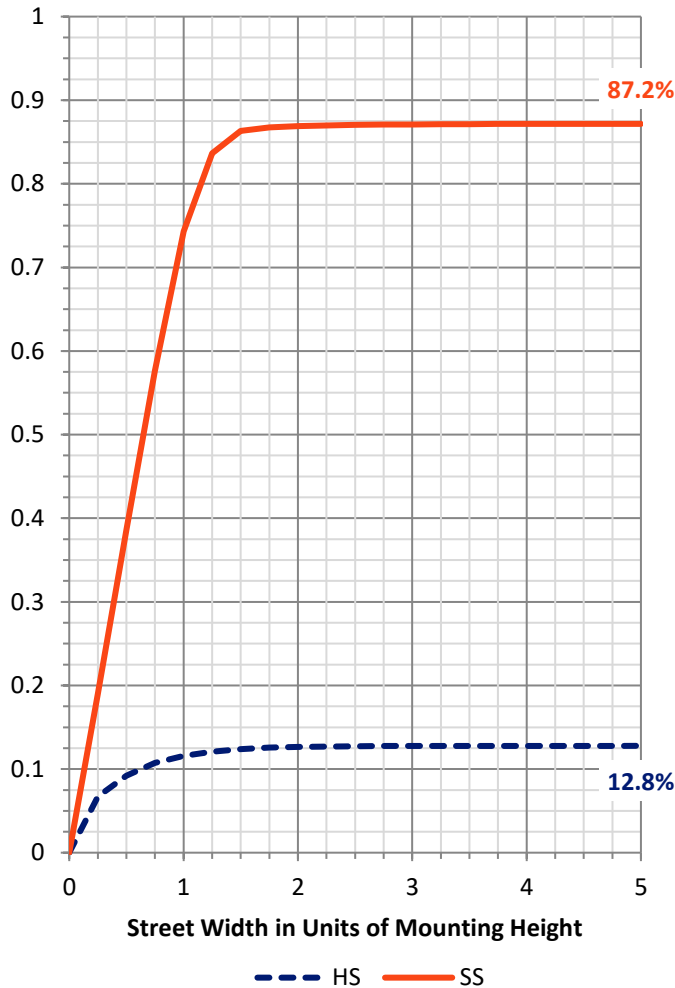
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3247.3	0.0	3247.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	22026.8	0.0	22026.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	25274.2	0.0	25274.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	710.3	2.8
10°-20°	1832.7	7.3
20°-30°	3024.5	12.0
30°-40°	4991.1	19.7
40°-50°	7897.1	31.2
50°-60°	5979.0	23.7
60°-70°	748.3	3.0
70°-80°	84.6	0.3
80°-90°	6.5	0.0
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°	25274.2	100.0
0°-180°	25274.2	100.0

Coefficient of Utilization



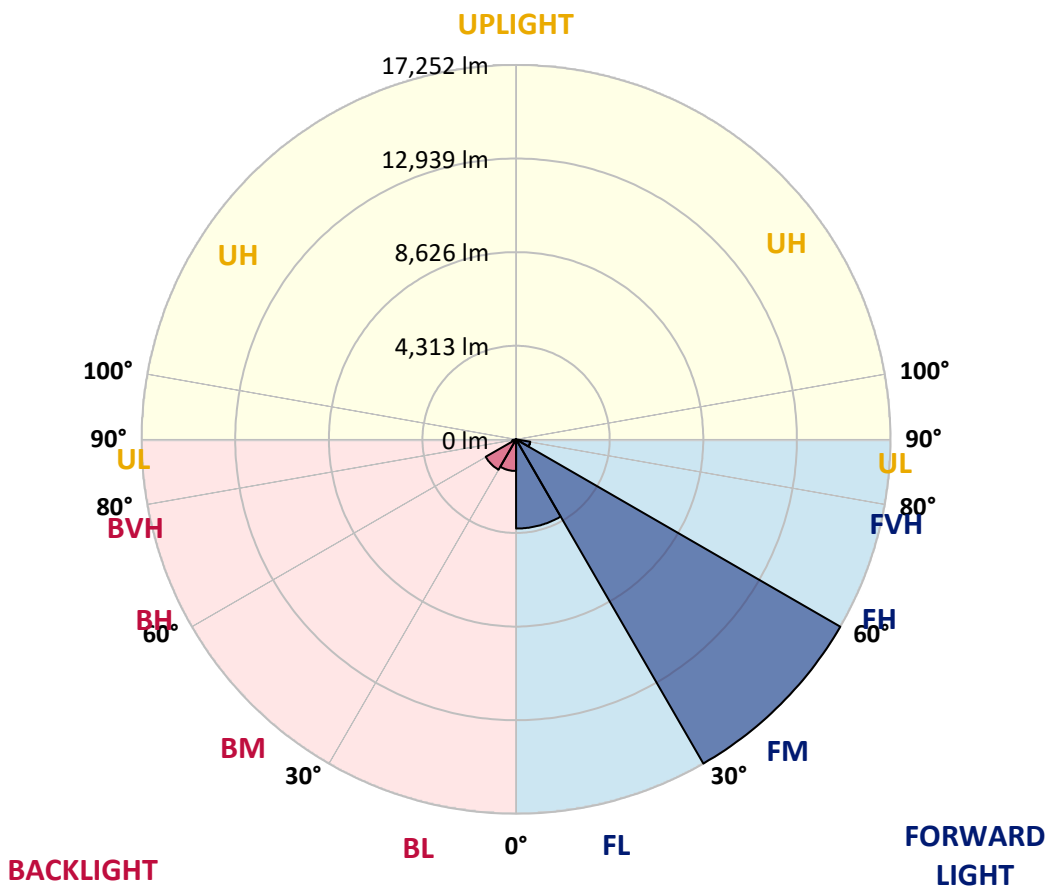
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4110.0	16.3			
FM (30°-60°)	17252.3	68.3			
FH (60°-80°)	661.6	2.6			G1/1800
FVH (80°-90°)	3.0	0.0			G0/10
BL (0°-30°)	1457.5	5.8	B3/2500		
BM (30°-60°)	1615.0	6.4	B2/2500		
BH (60°-80°)	171.4	0.7	B1/500		G1/500
BVH (80°-90°)	3.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	7657.1	7657.1	7657.1	7657.1	7657.1	7657.1	7657.1	7657.1	7657.1	7657.1	7657.1
2.5°	8725.2	8794.9	8775.7	8684.3	8585.6	8515.9	8407.6	8374.0	8128.6	7957.8	7777.4
5°	9778.8	9800.5	9776.4	9665.8	9492.6	9326.6	9148.6	9045.1	8633.8	8263.3	7885.6
7.5°	10031.4	10005.0	10050.7	10106.0	10081.9	10009.8	9822.1	9709.1	9218.3	8614.5	8042.0
10°	9242.4	9182.2	9353.0	9639.3	9940.0	10279.2	10231.1	10240.7	9788.5	9057.1	8246.5
12.5°	8195.9	8171.9	8299.4	8631.4	9220.7	9990.5	10175.8	10486.1	10310.5	9535.9	8479.8
15°	7736.5	7748.5	7825.5	8034.8	8458.1	9415.6	9860.6	10421.1	10777.2	10000.1	8737.2
17.5°	7806.2	7849.5	7847.1	7916.9	8174.3	8941.7	9461.3	10216.7	11138.0	10534.2	9033.1
20°	8280.1	8323.4	8258.5	8205.6	8292.2	8821.4	9252.0	10009.8	11381.0	11073.1	9345.8
22.5°	8989.8	9040.3	8886.3	8734.8	8679.5	9018.7	9331.4	9925.6	11566.2	11566.2	9624.9
25°	9848.6	9918.4	9680.2	9410.8	9256.8	9434.8	9670.6	10115.6	11756.2	12008.8	9814.9
27.5°	10808.4	10810.8	10606.4	10303.3	10014.6	10036.2	10178.2	10543.8	11965.5	12485.2	9964.1
30°	11888.6	11895.8	11623.9	11260.7	10897.4	10798.8	10919.1	11195.7	12401.0	13084.1	10170.9
32.5°	13283.8	13317.5	12927.8	12393.7	11922.2	11737.0	11806.8	12097.8	13093.8	13834.7	10481.3
35°	15169.8	15205.9	14631.0	13926.1	13175.6	12896.5	12966.3	13259.8	14096.9	14900.4	10976.8
37.5°	17031.8	17079.9	16497.7	15841.0	14811.4	14349.5	14421.7	14700.7	15602.8	16372.6	11770.7
40°	18318.8	18383.7	18203.3	17760.7	16805.6	16199.4	16286.0	16387.1	17260.3	18133.5	12800.3
42.5°	18997.2	19088.6	19165.5	19391.7	18888.9	18381.3	18234.6	18241.8	18946.6	19928.1	13870.8
45°	19038.1	19127.1	19521.6	20394.8	20777.3	20671.5	20404.4	20224.0	20233.6	21123.7	14539.5
47.5°	17715.0	17880.9	18619.5	20329.9	21768.4	22646.5	22511.8	22083.6	20774.9	21203.1	14467.4
50°	14580.4	14744.0	16086.4	18547.3	21046.7	23435.5	23991.2	23416.3	20421.3	20214.4	13724.0
52.5°	10589.5	10606.4	11477.2	14351.9	18121.5	21980.1	23288.8	23233.4	19882.4	19016.4	12708.9
55°	5030.1	4970.0	5949.1	8099.7	12533.3	17777.5	19983.5	20608.9	19117.4	18150.4	11922.2
57.5°	1465.0	1493.9	1929.3	3161.0	6269.0	11361.7	13685.6	14849.9	15691.8	14922.0	9247.2
60°	656.7	659.1	733.7	962.2	2088.1	5285.1	7074.9	8515.9	9381.9	8693.9	4587.5
62.5°	476.3	478.7	507.6	543.7	709.7	1789.8	2653.4	3536.3	3601.2	2357.5	1161.9
65°	396.9	396.9	401.7	401.7	425.8	639.9	805.9	1039.2	875.6	649.5	454.7
67.5°	319.9	322.4	327.2	327.2	319.9	319.9	346.4	380.1	406.5	502.8	418.6
70°	250.2	247.8	247.8	250.2	243.0	206.9	223.7	255.0	279.1	392.1	363.2
72.5°	194.9	197.3	194.9	185.2	168.4	122.7	132.3	166.0	178.0	245.4	245.4
75°	146.7	149.1	139.5	105.8	69.8	38.5	50.5	81.8	103.4	120.3	89.0
77.5°	19.2	19.2	14.4	14.4	12.0	14.4	14.4	19.2	28.9	28.9	21.7
80°	2.4	2.4	2.4	4.8	7.2	9.6	9.6	9.6	9.6	12.0	12.0
82.5°	2.4	2.4	2.4	2.4	7.2	7.2	9.6	9.6	9.6	9.6	9.6
85°	0.0	0.0	0.0	2.4	4.8	7.2	7.2	9.6	9.6	9.6	9.6
87.5°	0.0	0.0	0.0	2.4	4.8	7.2	7.2	7.2	9.6	9.6	9.6
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°	7657.1	7657.1	7657.1	7657.1	7657.1	7657.1	7657.1	7657.1	7657.1	7657.1	7657.1
2.5°	7669.1	7529.6	7361.2	7245.7	7082.1	6973.9	6819.9	6716.5	6627.5	6557.7	6596.2
5°	7671.5	7450.2	7106.2	6812.7	6492.8	6199.3	5884.1	5636.4	5412.6	5311.6	5366.9
7.5°	7719.6	7402.1	6875.3	6353.2	5739.8	5133.6	4565.9	4104.0	3875.4	3767.2	3800.9
10°	7813.4	7380.4	6617.9	5751.8	4755.9	3928.4	3377.5	3064.8	2937.3	2869.9	2881.9
12.5°	7900.0	7366.0	6283.5	4960.4	3752.8	3047.9	2761.6	2718.3	2744.8	2747.2	2744.8
15°	8017.9	7339.5	5869.7	4147.3	3002.2	2634.2	2641.4	2703.9	2766.5	2785.7	2780.9
17.5°	8143.0	7298.6	5335.7	3367.9	2547.5	2513.9	2598.1	2682.3	2744.8	2754.4	2756.8
20°	8272.9	7214.4	4727.0	2749.6	2335.9	2422.5	2516.3	2578.8	2624.5	2639.0	2643.8
22.5°	8333.1	7036.4	4024.6	2307.0	2193.9	2309.4	2379.2	2460.9	2475.4	2422.5	2432.1
25°	8301.8	6735.7	3339.0	2008.7	2052.0	2167.5	2270.9	2230.0	2169.9	2131.4	2143.4
27.5°	8203.2	6336.4	2667.8	1789.8	1900.4	2047.2	2059.2	2013.5	2003.9	1972.6	1982.2
30°	8097.3	5876.9	2145.8	1614.2	1746.5	1900.4	1864.4	1881.2	1883.6	1847.5	1859.5
32.5°	8032.4	5395.8	1708.0	1496.3	1647.8	1676.7	1748.9	1782.6	1785.0	1700.8	1715.2
35°	8054.0	4921.9	1445.8	1400.1	1556.4	1549.2	1650.3	1669.5	1530.0	1414.5	1426.5
37.5°	8229.6	4484.1	1296.6	1325.5	1397.7	1453.0	1530.0	1402.5	1371.2	1318.3	1325.5
40°	8556.8	4111.2	1207.6	1279.8	1289.4	1378.4	1260.5	1277.4	1279.8	1246.1	1253.3
42.5°	8939.3	3800.9	1154.7	1253.3	1229.3	1243.7	1125.8	1159.5	1195.6	1181.2	1183.6
45°	9131.7	3497.8	1109.0	1161.9	1169.1	1032.0	1005.5	1041.6	1087.3	1094.6	1097.0
47.5°	8960.9	3209.1	1060.9	1029.6	1077.7	940.6	909.3	921.4	974.3	1003.1	1008.0
50°	8438.9	2877.1	988.7	911.7	885.3	844.4	815.5	817.9	878.1	928.6	938.2
52.5°	7705.2	2530.7	870.8	772.2	712.1	743.3	750.6	736.1	791.4	842.0	851.6
55°	6993.1	2097.7	690.4	627.9	572.5	639.9	659.1	639.9	656.7	690.4	692.8
57.5°	4924.3	1186.0	529.2	519.6	473.9	548.5	579.8	550.9	522.0	543.7	548.5
60°	2282.9	620.6	406.5	406.5	394.5	471.5	524.4	483.5	428.2	437.8	445.0
62.5°	714.5	392.1	298.3	281.5	322.4	401.7	445.0	404.1	339.2	339.2	348.8
65°	404.1	336.8	235.8	216.5	262.2	322.4	348.8	305.5	247.8	243.0	243.0
67.5°	375.3	319.9	209.3	175.6	185.2	206.9	216.5	187.6	170.8	168.4	170.8
70°	310.3	267.0	168.4	120.3	113.1	110.7	115.5	108.3	103.4	105.8	113.1
72.5°	192.4	161.2	105.8	72.2	62.5	60.1	60.1	60.1	57.7	57.7	57.7
75°	69.8	60.1	48.1	36.1	31.3	28.9	28.9	31.3	28.9	26.5	24.1
77.5°	21.7	19.2	19.2	19.2	16.8	14.4	12.0	12.0	9.6	7.2	7.2
80°	12.0	12.0	12.0	12.0	9.6	9.6	7.2	4.8	2.4	2.4	0.0
82.5°	12.0	12.0	12.0	9.6	9.6	9.6	7.2	4.8	2.4	0.0	0.0
85°	9.6	9.6	9.6	9.6	9.6	9.6	7.2	4.8	2.4	0.0	0.0
87.5°	9.6	9.6	9.6	9.6	9.6	9.6	7.2	4.8	2.4	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)