

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: P638988

Luminaire Tested: GWS-SA4F-830-U-T2R-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638988
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-13)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4F-830-U-T2R-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23788.1 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

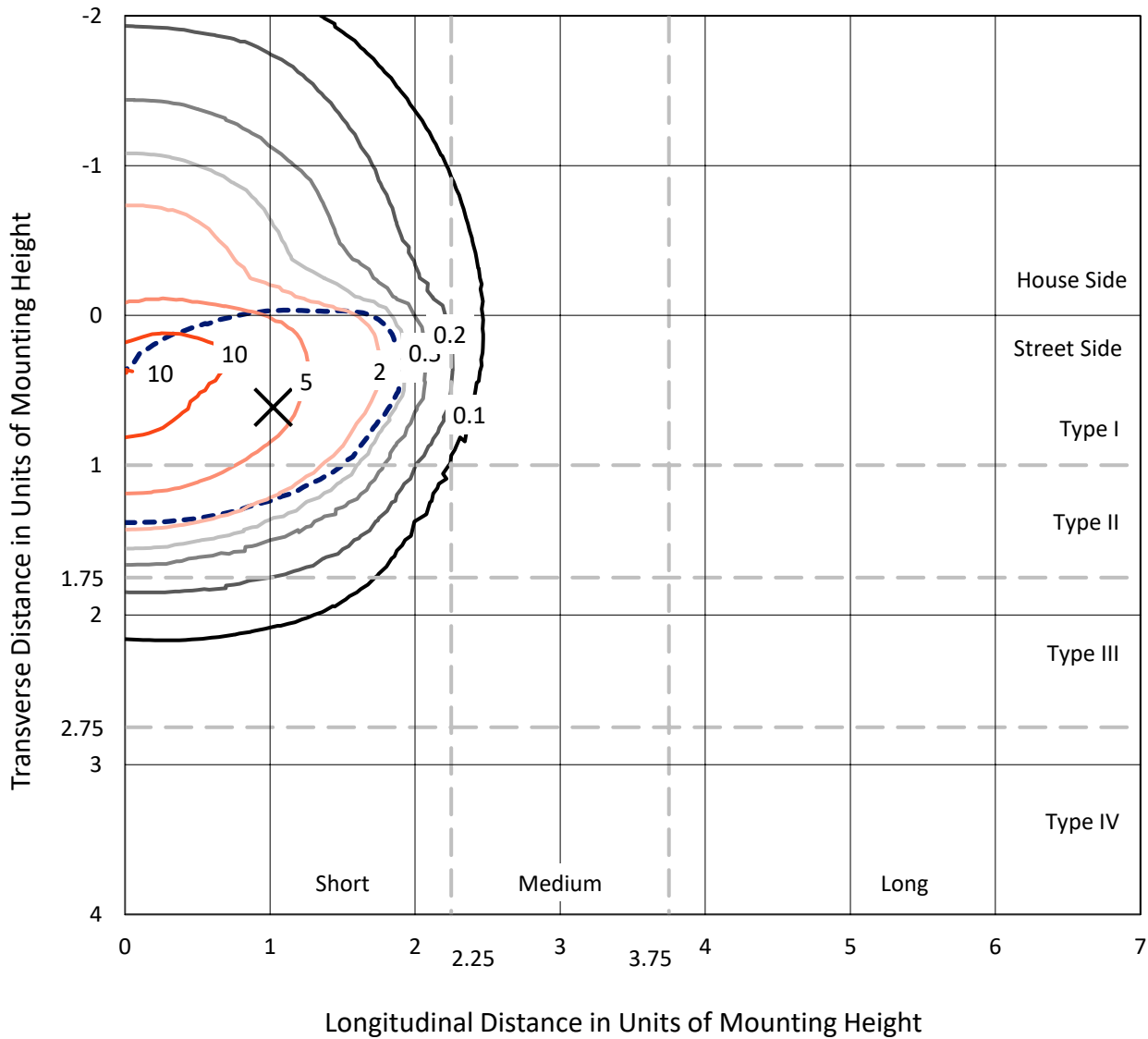
Input Watts (W): 225.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

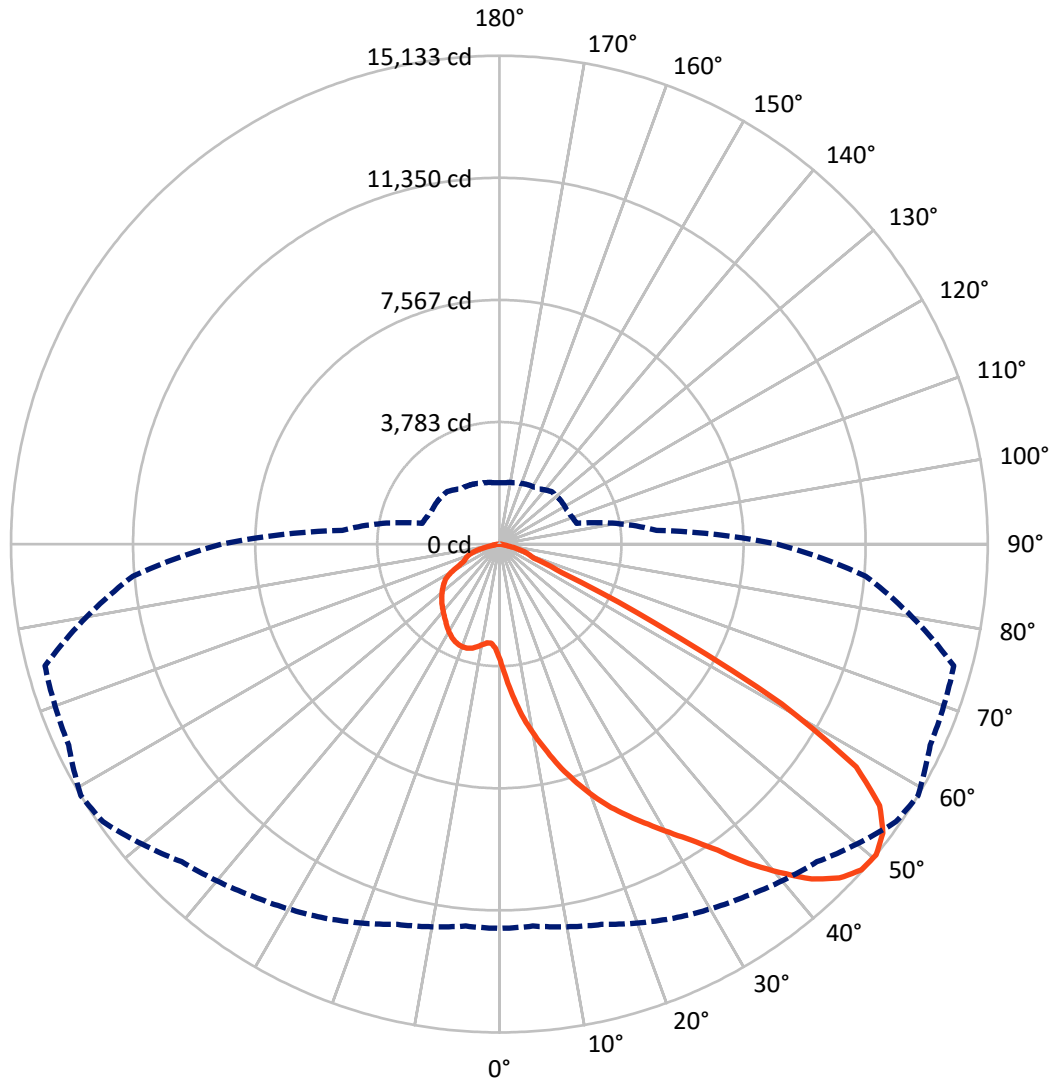
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5471.7	0.0	5471.7
	% Fixture	23.0	0.0	23.0
Street Side	Lumens	18316.4	0.0	18316.4
	% Fixture	77.0	0.0	77.0
Total	Lumens	23788.1	0.0	23788.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	404.3	1.7
10°-20°	1467.7	6.2
20°-30°	2779.3	11.7
30°-40°	4608.9	19.4
40°-50°	6296.0	26.5
50°-60°	5715.2	24.0
60°-70°	1903.2	8.0
70°-80°	555.1	2.3
80°-90°	58.3	0.2
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°	23788.1	100.0
0°-180°	23788.1	100.0

Coefficient of Utilization



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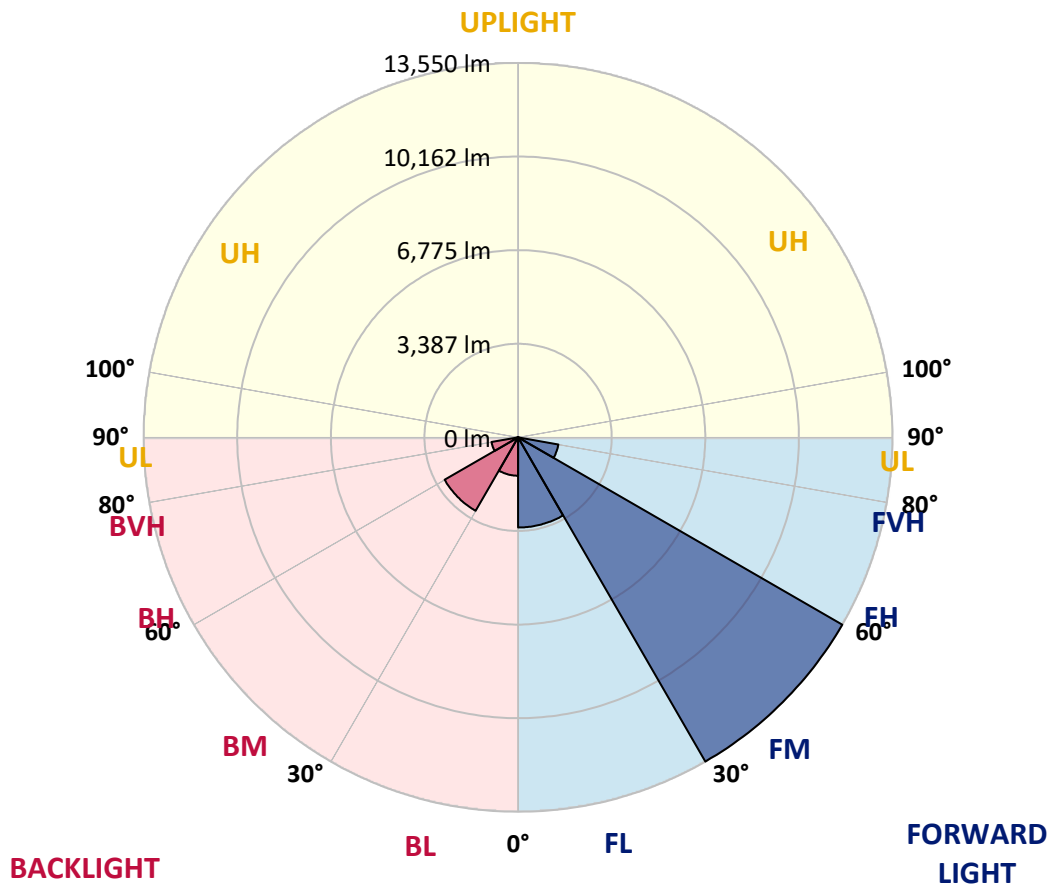
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3261.9	13.7			
FM (30°-60°)	13550.0	57.0			
FH (60°-80°)	1481.7	6.2			G1/1800
FVH (80°-90°)	22.8	0.1			G1/100
BL (0°-30°)	1389.4	5.8	B3/2500		
BM (30°-60°)	3070.2	12.9	B3/5000		
BH (60°-80°)	976.7	4.1	B2/1000		G2/1000
BVH (80°-90°)	35.5	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	3604.1	3604.1	3604.1	3604.1	3604.1	3604.1	3604.1	3604.1	3604.1	3604.1	3604.1
2.5°	4669.8	4704.7	4650.4	4654.3	4518.6	4456.6	4282.2	4179.6	4111.7	3921.8	3749.4
5°	5611.5	5570.8	5528.2	5503.0	5384.8	5218.1	5001.1	4828.7	4669.8	4297.8	3939.3
7.5°	6188.9	6167.6	6138.5	6123.0	6006.8	5832.4	5615.4	5468.1	5237.5	4733.7	4169.9
10°	6679.1	6654.0	6636.5	6648.1	6553.2	6440.8	6204.4	6035.8	5776.2	5194.9	4448.9
12.5°	7058.9	7072.5	7078.3	7140.3	7099.6	7031.8	6787.7	6609.4	6320.7	5681.2	4776.4
15°	7359.3	7355.4	7423.2	7541.4	7607.3	7564.7	7369.0	7219.8	6867.1	6159.9	5129.0
17.5°	7429.0	7432.9	7539.5	7746.8	7961.9	8066.5	7956.1	7777.8	7429.0	6632.6	5495.2
20°	7485.2	7493.0	7603.4	7839.8	8153.7	8446.3	8463.7	8335.9	8035.5	7144.2	5867.3
22.5°	7839.8	7857.3	7886.3	8035.5	8318.4	8688.5	8892.0	8864.8	8612.9	7680.9	6268.4
25°	8771.8	8719.5	8578.1	8535.4	8643.9	8944.3	9291.1	9343.4	9219.4	8271.9	6700.5
27.5°	9922.8	9866.6	9657.3	9436.5	9202.0	9306.6	9676.7	9833.7	9835.6	8923.0	7134.5
30°	10967.2	10922.6	10752.1	10436.3	10031.3	9880.2	10153.4	10364.6	10490.5	9674.8	7628.6
32.5°	11860.5	11819.8	11589.2	11331.5	10936.2	10632.0	10730.8	10934.3	11228.8	10647.5	8242.8
35°	12612.3	12571.6	12350.7	12091.1	11724.8	11542.7	11507.8	11647.3	12029.1	11662.8	8948.2
37.5°	13222.7	13182.0	12951.4	12707.2	12428.2	12439.8	12492.2	12560.0	12778.9	12749.9	9701.9
40°	13617.9	13575.3	13410.6	13236.2	13059.9	13199.4	13459.1	13377.7	13493.9	13627.6	10395.6
42.5°	13794.3	13740.0	13645.1	13606.3	13552.1	13769.1	14269.0	14187.6	14048.1	14212.8	10911.0
45°	13617.9	13571.4	13569.5	13687.7	13813.6	14092.7	14829.0	14763.1	14410.4	14495.7	11219.1
47.5°	13077.3	13036.6	13147.1	13457.1	13767.1	14174.1	15078.9	15090.6	14668.2	14613.9	11418.7
50°	11908.9	11881.8	12201.5	12788.6	13323.4	13920.2	14999.5	15133.2	14730.2	14577.1	11393.5
52.5°	9533.3	9659.3	10354.9	11335.4	12374.0	13474.6	14705.0	14879.4	14431.8	14334.9	11257.9
55°	6526.1	6584.2	7279.8	8711.8	10358.8	12509.6	14028.7	14298.1	14079.1	14294.2	11399.3
57.5°	3379.3	3425.8	3974.2	5245.3	7026.0	9886.0	12151.1	13034.7	13368.0	14499.6	11839.2
60°	1387.4	1426.1	1652.8	2267.1	3544.0	5756.8	8744.7	10054.6	10837.4	13242.0	10513.8
62.5°	1007.6	1027.0	1135.5	1352.5	1856.3	2821.2	4948.8	5431.3	5981.6	8299.0	6675.3
65°	848.7	870.0	957.2	1089.0	1354.4	1730.3	2114.0	2125.6	2342.6	3381.2	2474.4
67.5°	711.1	730.5	808.0	920.4	1094.8	1228.5	1135.5	1137.4	1133.5	1226.5	1185.9
70°	554.2	569.7	647.2	767.3	858.4	788.6	887.5	982.4	941.7	978.5	1034.7
72.5°	405.0	422.4	490.2	581.3	558.0	561.9	718.9	815.8	792.5	833.2	885.5
75°	292.6	304.2	339.1	290.7	306.2	370.1	505.7	558.0	581.3	616.2	662.7
77.5°	94.9	94.9	106.6	133.7	166.6	205.4	257.7	279.0	313.9	352.7	385.6
80°	48.4	50.4	60.1	73.6	93.0	118.2	151.1	160.8	178.3	199.6	213.1
82.5°	23.3	25.2	29.1	36.8	48.4	62.0	83.3	93.0	104.6	118.2	127.9
85°	5.8	5.8	7.8	11.6	15.5	23.3	31.0	36.8	46.5	56.2	62.0
87.5°	0.0	0.0	0.0	0.0	0.0	1.9	5.8	7.8	9.7	11.6	15.5
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°	3604.1	3604.1	3604.1	3604.1	3604.1	3604.1	3604.1	3604.1	3604.1	3604.1	3604.1
2.5°	3671.9	3563.4	3423.9	3305.7	3197.2	3113.8	3042.1	3007.3	2974.3	2951.1	2958.8
5°	3772.6	3586.6	3327.0	3146.8	3036.3	2980.1	2941.4	2922.0	2918.1	2902.6	2896.8
7.5°	3919.9	3654.4	3307.6	3125.5	3051.8	3022.8	3001.5	2989.8	2995.6	2980.1	2974.3
10°	4102.0	3766.8	3356.0	3195.2	3131.3	3110.0	3086.7	3071.2	3063.5	3040.2	3036.3
12.5°	4328.8	3906.3	3443.2	3284.3	3220.4	3183.6	3152.6	3125.5	3108.0	3079.0	3071.2
15°	4572.9	4061.4	3545.9	3371.5	3296.0	3241.7	3191.3	3150.7	3119.6	3080.9	3075.1
17.5°	4838.4	4224.1	3631.2	3431.6	3334.7	3263.0	3189.4	3129.3	3086.7	3036.3	3030.5
20°	5115.4	4388.8	3695.1	3460.7	3336.7	3239.8	3141.0	3061.5	3007.3	2956.9	2953.0
22.5°	5402.2	4540.0	3733.9	3452.9	3305.7	3185.5	3067.3	2978.2	2914.3	2854.2	2850.3
25°	5690.9	4685.3	3743.6	3421.9	3243.7	3104.1	2985.9	2881.3	2809.6	2741.8	2734.1
27.5°	5983.5	4807.4	3720.3	3359.9	3160.3	3009.2	2891.0	2788.3	2714.7	2646.9	2635.2
30°	6295.5	4912.0	3669.9	3278.5	3063.5	2908.4	2792.2	2714.7	2644.9	2577.1	2565.5
32.5°	6628.8	5003.1	3598.3	3179.7	2951.1	2807.7	2722.4	2652.7	2582.9	2522.8	2511.2
35°	7026.0	5063.1	3491.7	3051.8	2846.4	2734.1	2675.9	2594.5	2509.3	2443.4	2437.6
37.5°	7436.8	5109.6	3363.8	2929.8	2755.4	2691.4	2643.0	2532.5	2426.0	2346.5	2336.8
40°	7834.0	5148.4	3204.9	2815.4	2672.0	2660.4	2594.5	2457.0	2272.9	2183.8	2176.0
42.5°	8204.1	5160.0	3038.3	2693.4	2596.5	2590.7	2517.0	2303.9	2162.4	2106.2	2098.5
45°	8457.9	5150.3	2865.8	2579.0	2520.9	2489.9	2412.4	2193.4	2106.2	2055.9	2046.2
47.5°	8645.9	5099.9	2672.0	2458.9	2435.7	2393.0	2226.4	2123.7	2042.3	1991.9	1982.2
50°	8612.9	4890.7	2476.3	2342.6	2333.0	2296.1	2090.7	2036.5	1964.8	1910.5	1902.8
52.5°	8442.4	4493.5	2276.8	2214.8	2234.1	2162.4	1993.9	1931.9	1869.9	1807.8	1794.3
55°	8485.1	4206.7	2125.6	2090.7	2125.6	1962.9	1885.4	1819.5	1761.3	1701.3	1689.6
57.5°	8671.1	3923.8	1964.8	1957.0	1993.9	1809.8	1745.8	1662.5	1579.2	1530.8	1530.8
60°	7281.8	2860.0	1681.9	1701.3	1784.6	1685.8	1629.6	1544.3	1453.3	1410.6	1410.6
62.5°	4305.5	1794.3	1395.1	1373.8	1426.1	1488.1	1519.1	1449.4	1340.9	1284.7	1286.6
65°	1897.0	1306.0	1230.4	1213.0	1197.5	1240.1	1325.4	1331.2	1216.9	1151.0	1152.9
67.5°	1168.4	1182.0	1151.0	1137.4	1123.8	1116.1	1108.3	1112.2	1081.2	1021.2	1019.2
70°	1054.1	1090.9	1069.6	1058.0	1040.5	1027.0	980.5	904.9	852.6	837.1	854.5
72.5°	906.8	957.2	945.6	939.8	918.5	885.5	823.5	749.9	687.9	649.1	656.9
75°	684.0	724.7	730.5	732.4	709.2	678.2	614.2	552.2	498.0	457.3	467.0
77.5°	393.3	416.6	422.4	428.2	410.8	399.2	356.5	312.0	282.9	240.3	251.9
80°	219.0	228.6	228.6	230.6	220.9	207.3	178.3	153.1	139.5	120.1	122.1
82.5°	131.8	135.6	137.6	139.5	133.7	120.1	98.8	81.4	73.6	63.9	62.0
85°	63.9	67.8	67.8	69.8	60.1	52.3	40.7	31.0	27.1	19.4	21.3
87.5°	15.5	17.4	17.4	15.5	13.6	9.7	5.8	1.9	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)