

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: P638989

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

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638989
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-14)
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-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21798.1 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G3

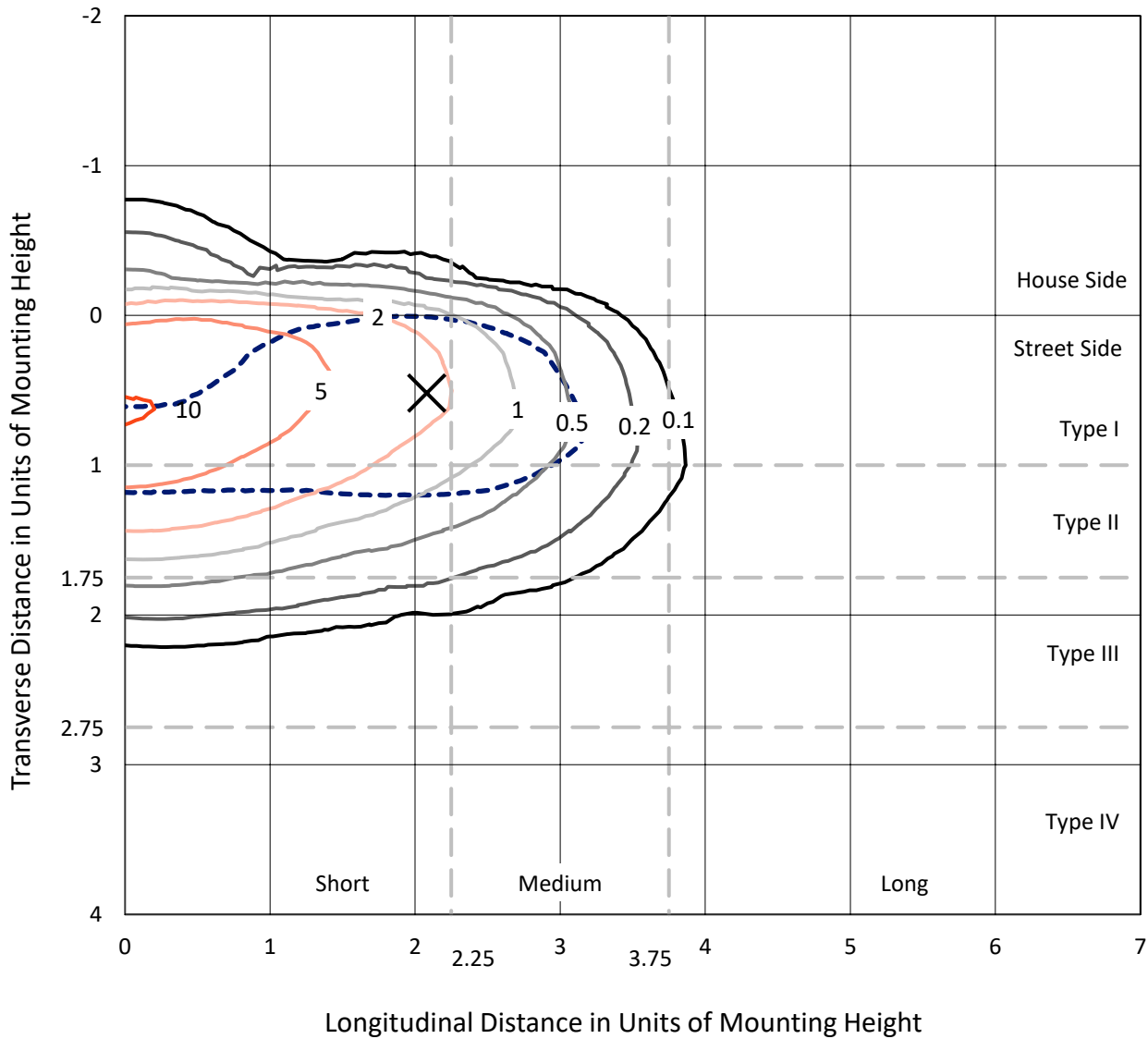
Input Watts (W): 225.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

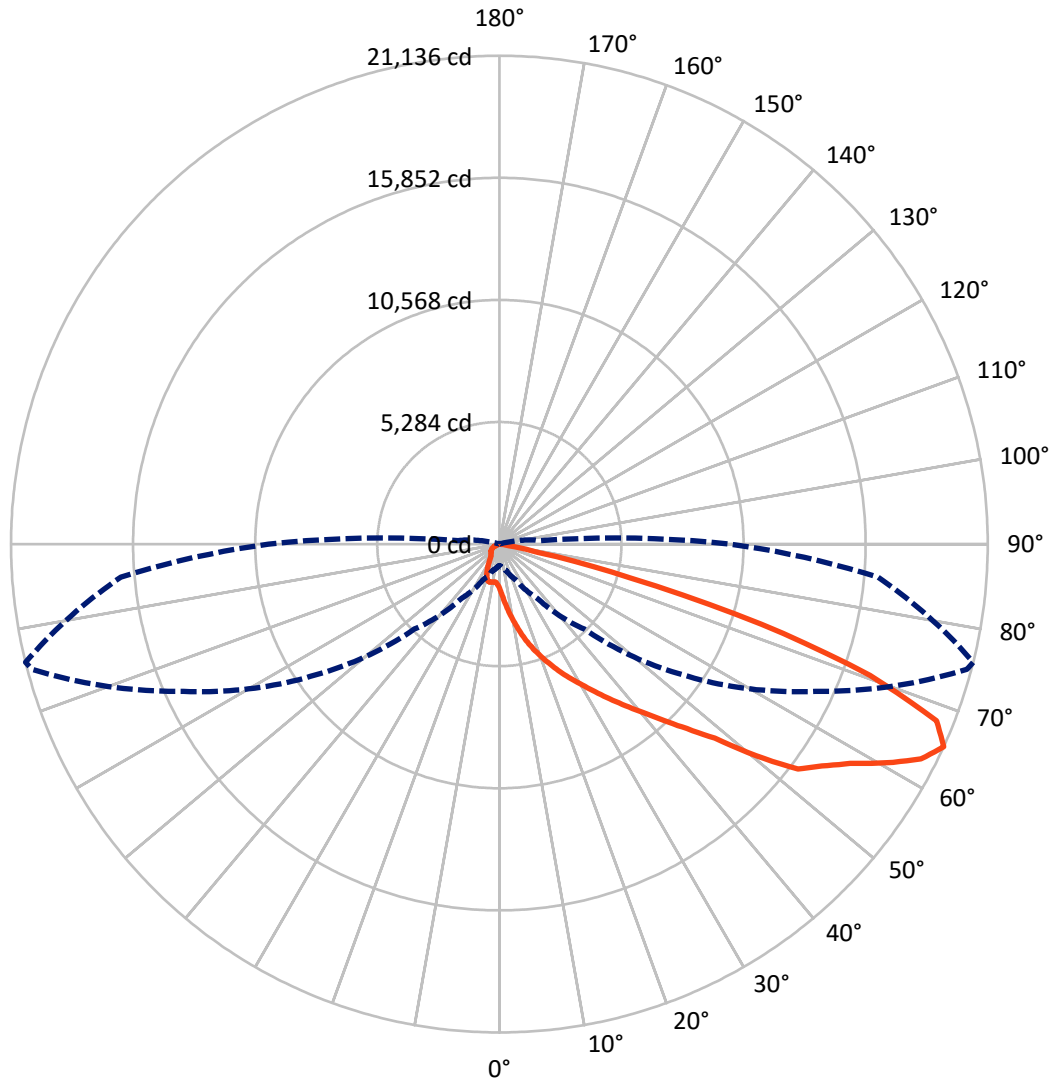
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1205.3	0.0	1205.3
	% Fixture	5.5	0.0	5.5
Street Side	Lumens	20592.8	0.0	20592.8
	% Fixture	94.5	0.0	94.5
Total	Lumens	21798.1	0.0	21798.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.8	1.1
10°-20°	890.9	4.1
20°-30°	1817.5	8.3
30°-40°	3232.6	14.8
40°-50°	4778.5	21.9
50°-60°	5471.0	25.1
60°-70°	4174.1	19.1
70°-80°	1169.3	5.4
80°-90°	29.4	0.1
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°	21798.1	100.0
0°-180°	21798.1	100.0

Coefficient of Utilization



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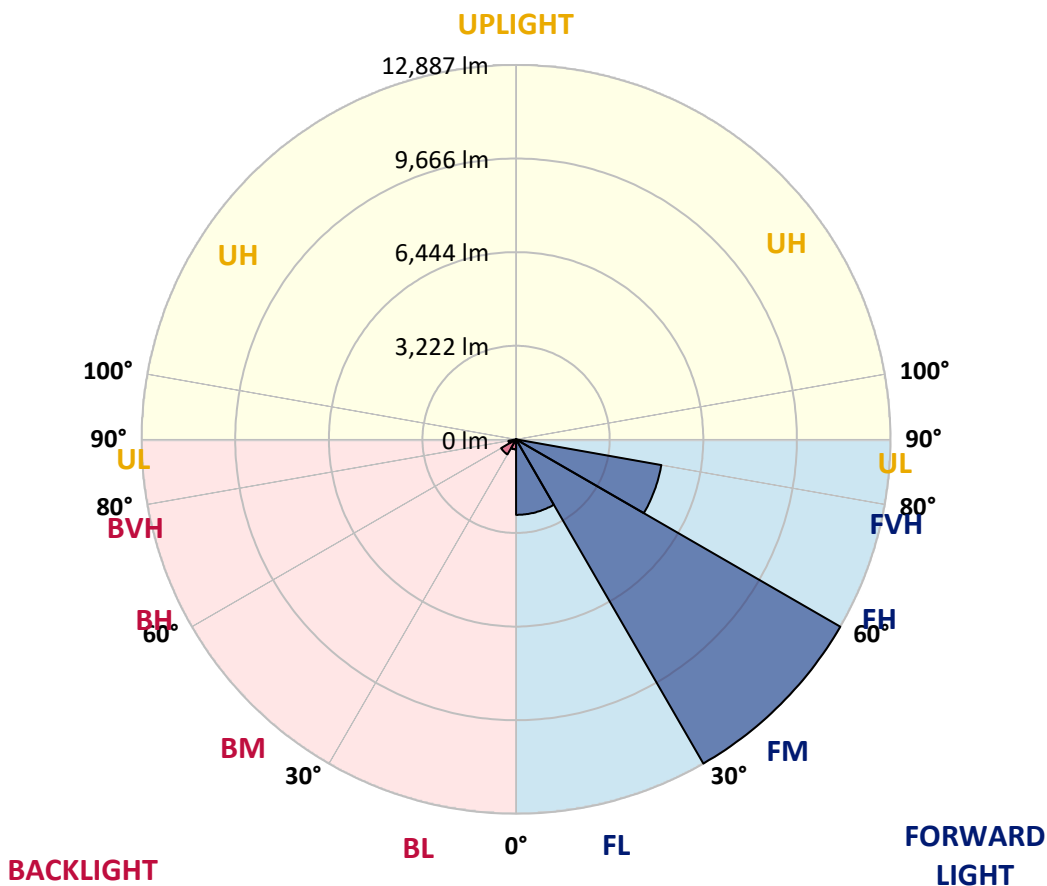
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2599.3	11.9			
FM (30°-60°)	12887.4	59.1			
FH (60°-80°)	5078.4	23.3			G3/7500
FVH (80°-90°)	27.7	0.1			G1/100
BL (0°-30°)	343.9	1.6	B1/500		
BM (30°-60°)	594.7	2.7	B1/1000		
BH (60°-80°)	265.0	1.2	B1/500		G1/500
BVH (80°-90°)	1.7	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1929.9	1929.9	1929.9	1929.9	1929.9	1929.9	1929.9	1929.9	1929.9	1929.9	1929.9
2.5°	2974.3	3018.9	2984.0	2925.9	2813.5	2705.0	2565.5	2373.7	2220.6	2201.2	2057.8
5°	4016.8	4012.9	3937.4	3861.8	3743.6	3557.6	3276.6	2920.1	2577.1	2548.0	2226.4
7.5°	4636.9	4642.7	4600.0	4541.9	4425.7	4233.8	3941.2	3511.1	3009.2	2951.1	2457.0
10°	5158.1	5156.2	5125.2	5098.0	4993.4	4865.5	4551.6	4078.8	3474.3	3383.2	2714.7
12.5°	5549.5	5563.1	5578.6	5605.7	5561.1	5435.2	5138.7	4623.3	3945.1	3844.4	3009.2
15°	5859.5	5863.4	5921.5	6026.2	6063.0	5997.1	5727.8	5150.3	4410.2	4323.0	3348.3
17.5°	5952.5	5960.3	6059.1	6250.9	6444.7	6481.5	6278.1	5681.3	4867.4	4774.4	3677.7
20°	6148.3	6165.7	6239.3	6407.9	6652.0	6849.7	6770.2	6218.0	5324.7	5202.7	4014.9
22.5°	6764.4	6774.1	6748.9	6770.2	6896.2	7124.8	7173.3	6737.3	5793.7	5663.8	4379.2
25°	7824.3	7828.2	7651.9	7485.2	7390.3	7432.9	7539.5	7215.9	6258.7	6130.8	4718.2
27.5°	8924.9	8938.5	8727.3	8444.4	8105.3	7911.5	7880.5	7653.8	6727.6	6586.2	5053.5
30°	9961.6	9961.6	9738.8	9393.9	8940.4	8562.6	8339.8	8095.6	7229.5	7074.5	5396.4
32.5°	10893.6	10885.9	10601.0	10227.1	9779.5	9364.8	8895.9	8556.8	7787.5	7615.1	5791.7
35°	11662.9	11643.5	11319.9	10961.4	10482.8	10174.7	9651.6	9052.8	8392.1	8219.6	6198.6
37.5°	12244.2	12222.9	11926.4	11546.6	11102.9	10903.3	10465.4	9647.7	9029.6	8872.6	6650.1
40°	12560.0	12517.4	12312.0	12029.1	11657.1	11482.7	11300.5	10386.0	9779.5	9583.8	7183.0
42.5°	12653.0	12602.7	12467.0	12335.3	12110.5	11972.9	12168.6	11219.2	10603.0	10434.4	7791.4
45°	12377.9	12348.8	12337.2	12432.1	12472.8	12511.6	12994.1	12141.5	11511.7	11383.9	8556.8
47.5°	11715.2	11707.4	11810.1	12205.4	12635.6	13044.4	13891.2	13278.9	12689.9	12552.3	9626.4
50°	10490.6	10570.0	10856.8	11550.5	12410.8	13346.7	14730.2	14856.2	14596.5	14395.0	11021.5
52.5°	8576.2	8729.2	9372.5	10426.6	11662.9	13261.5	15117.8	16119.5	16385.0	16175.7	12021.4
55°	6729.6	6872.9	7446.5	8783.5	10432.5	12612.3	15135.2	16555.5	17134.9	16941.1	12697.6
57.5°	5012.8	5144.5	5665.8	6944.6	8758.3	11335.4	14720.5	16797.7	18024.3	17900.3	13765.3
60°	3276.6	3406.4	3877.3	4995.3	6793.5	9475.2	13699.4	16747.3	19235.3	19223.7	15077.1
62.5°	1817.5	1920.2	2261.3	3133.2	4741.5	7338.0	12095.0	16241.6	20407.6	20481.3	16158.3
65°	930.1	996.0	1203.3	1722.6	2869.7	5202.7	9984.9	15082.9	20950.2	21136.2	16443.1
67.5°	608.4	629.7	680.1	895.2	1536.6	3272.7	7514.3	13224.6	20186.7	20403.7	15487.9
70°	494.1	511.5	540.6	596.8	792.5	1738.1	4935.3	10562.3	16867.5	17014.7	12333.3
72.5°	362.3	385.6	441.8	478.6	571.6	953.3	2567.4	6933.0	11583.4	11843.1	7750.7
75°	267.4	281.0	327.5	377.8	467.0	602.6	982.4	3644.8	5981.6	5830.5	3255.3
77.5°	160.8	170.5	209.3	242.2	333.3	375.9	343.0	1346.7	1819.5	1711.0	786.7
80°	79.4	89.1	137.6	182.1	213.1	151.1	143.4	375.9	405.0	405.0	197.6
82.5°	27.1	34.9	73.6	120.1	104.6	58.1	67.8	96.9	108.5	114.3	58.1
85°	0.0	0.0	17.4	34.9	15.5	7.8	17.4	21.3	27.1	29.1	19.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	5.8	7.8	7.8
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°	1929.9	1929.9	1929.9	1929.9	1929.9	1929.9	1929.9	1929.9	1929.9	1929.9	1929.9
2.5°	1980.3	1889.2	1751.7	1627.6	1532.7	1443.6	1375.8	1321.5	1311.8	1280.8	1284.7
5°	2069.4	1904.7	1650.9	1455.2	1317.6	1224.6	1147.1	1089.0	1063.8	1038.6	1019.2
7.5°	2207.0	1968.7	1612.1	1373.8	1213.0	1069.6	949.5	852.6	806.1	777.0	757.6
10°	2375.6	2057.8	1614.1	1325.4	1087.0	868.1	703.4	596.8	546.4	530.9	529.0
12.5°	2577.1	2170.2	1629.6	1245.9	904.9	645.2	521.2	472.8	457.3	443.7	443.7
15°	2790.3	2296.1	1629.6	1100.6	689.8	503.8	451.5	420.5	401.1	393.3	389.5
17.5°	3015.0	2414.3	1590.8	901.0	529.0	443.7	401.1	372.0	356.5	344.9	341.0
20°	3255.3	2526.7	1493.9	689.8	453.4	397.2	356.5	327.5	312.0	300.3	300.3
22.5°	3499.4	2631.4	1337.0	530.9	401.1	352.7	313.9	286.8	271.3	259.6	259.6
25°	3726.2	2701.1	1135.5	437.9	362.3	313.9	279.0	251.9	234.5	226.7	222.8
27.5°	3937.4	2745.7	912.6	385.6	325.5	281.0	244.1	219.0	205.4	199.6	195.7
30°	4156.3	2757.3	697.6	350.7	294.5	248.0	213.1	193.8	182.1	174.4	174.4
32.5°	4369.5	2743.8	532.9	321.7	267.4	219.0	189.9	172.5	162.8	157.0	155.0
35°	4586.5	2681.7	432.1	296.5	240.3	191.8	168.6	155.0	149.2	141.5	141.5
37.5°	4822.9	2598.4	375.9	271.3	213.1	172.5	151.1	141.5	133.7	127.9	125.9
40°	5117.4	2501.5	344.9	250.0	188.0	155.0	135.6	125.9	120.1	114.3	112.4
42.5°	5466.2	2406.6	329.4	226.7	168.6	137.6	122.1	110.4	104.6	96.9	94.9
45°	5960.3	2385.3	312.0	201.5	151.1	124.0	106.6	94.9	87.2	81.4	79.4
47.5°	6754.7	2445.3	282.9	174.4	133.7	108.5	91.1	81.4	71.7	65.9	62.0
50°	7543.4	2429.8	253.8	151.1	118.2	93.0	77.5	67.8	58.1	52.3	50.4
52.5°	7973.5	2356.2	226.7	133.7	102.7	79.4	65.9	54.3	48.4	42.6	40.7
55°	8363.0	2327.2	199.6	116.3	87.2	69.8	54.3	44.6	40.7	34.9	32.9
57.5°	9126.5	2395.0	176.3	100.8	75.6	60.1	46.5	36.8	32.9	27.1	25.2
60°	9924.8	2402.7	151.1	87.2	65.9	50.4	36.8	29.1	25.2	19.4	17.4
62.5°	10341.4	2207.0	124.0	73.6	54.3	42.6	31.0	23.3	19.4	11.6	11.6
65°	9992.6	1784.6	104.6	60.1	42.6	32.9	23.3	17.4	11.6	5.8	1.9
67.5°	8843.6	1269.2	87.2	48.4	31.0	23.3	17.4	11.6	1.9	0.0	0.0
70°	6475.7	724.7	67.8	34.9	23.3	15.5	11.6	5.8	0.0	0.0	0.0
72.5°	3980.0	387.5	50.4	23.3	17.4	11.6	9.7	3.9	0.0	0.0	0.0
75°	1509.5	186.0	31.0	15.5	13.6	9.7	5.8	1.9	0.0	0.0	0.0
77.5°	408.8	91.1	17.4	11.6	9.7	5.8	3.9	0.0	0.0	0.0	0.0
80°	106.6	42.6	11.6	7.8	5.8	3.9	0.0	0.0	0.0	0.0	0.0
82.5°	36.8	19.4	5.8	5.8	3.9	1.9	0.0	0.0	0.0	0.0	0.0
85°	15.5	7.8	3.9	3.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.8	1.9	1.9	1.9	1.9	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)