

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: P638519

Luminaire Tested: GWS-SA4F-722-U-AFL-W-HSS

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P638519  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-48)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA4F-722-U-AFL-W-HSS  
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND  
AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: (64) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

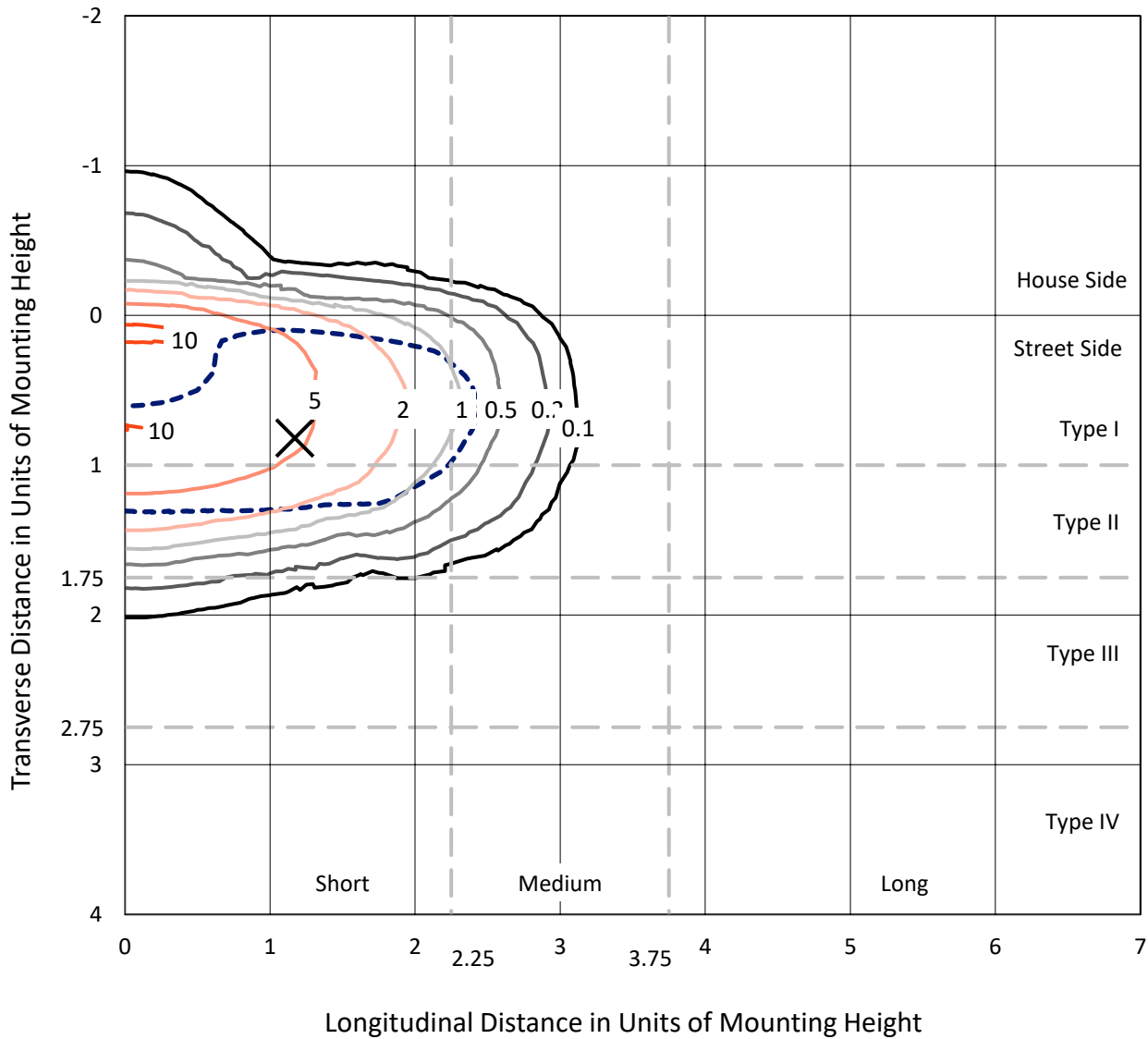
Lumens per Lamp: N/A  
Luminaire Lumens: 21017.2 lumens  
Efficiency: N/A  
Efficacy: 93.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 225.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
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

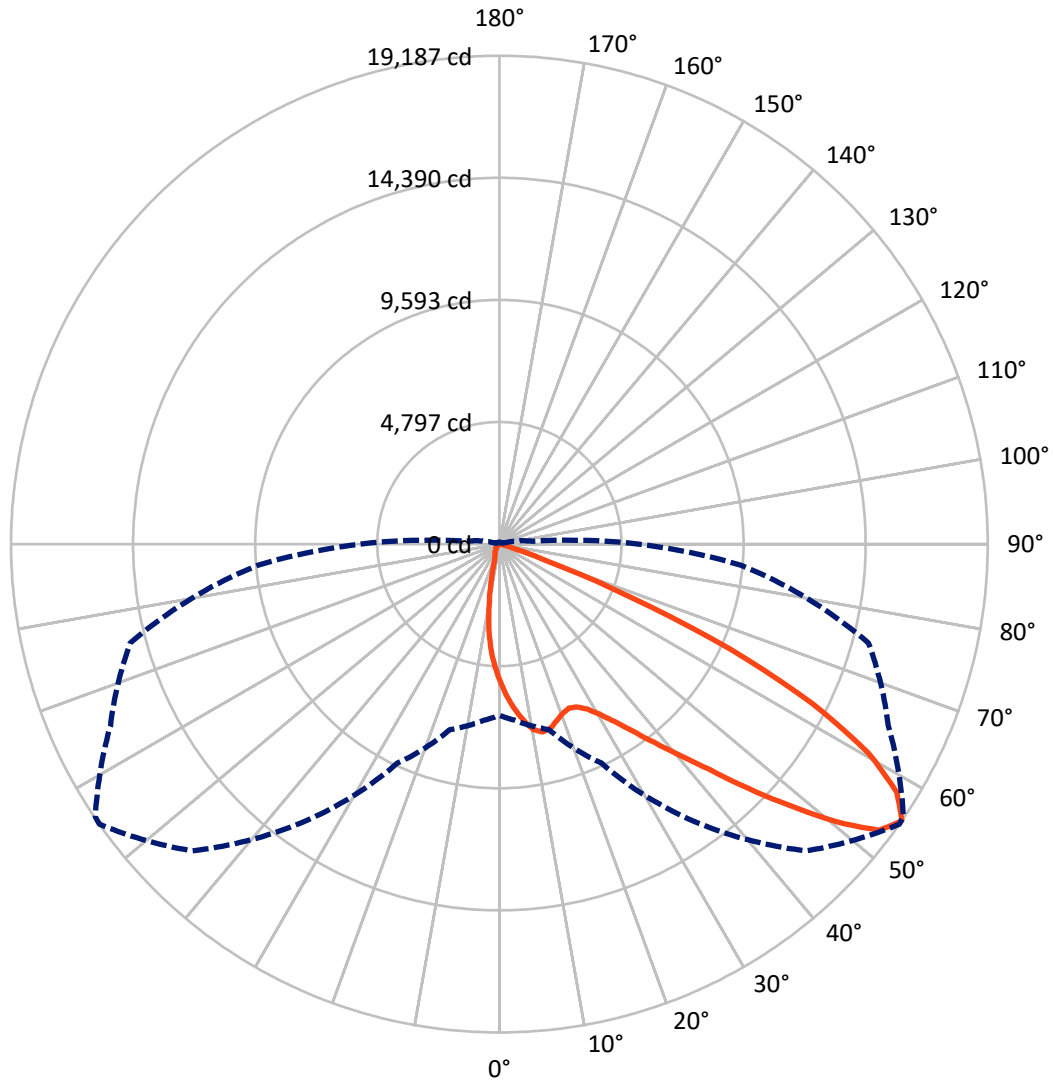
✕ Max cd  
 - - - 1/2 Max cd



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 55-Deg Lateral    - - - Horizontal Cone Through 55-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1296.9	0.0	1296.9
	% Fixture	6.2	0.0	6.2
<b>Street Side</b>	Lumens	19720.4	0.0	19720.4
	% Fixture	93.8	0.0	93.8
<b>Total</b>	Lumens	21017.2	0.0	21017.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	479.8	2.3
10°-20°	1156.9	5.5
20°-30°	1926.6	9.2
30°-40°	3283.1	15.6
40°-50°	5359.1	25.5
50°-60°	5610.7	26.7
60°-70°	2829.9	13.5
70°-80°	357.5	1.7
80°-90°	13.6	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°	21017.2	100.0
0°-180°	21017.2	100.0

**Coefficient of Utilization**



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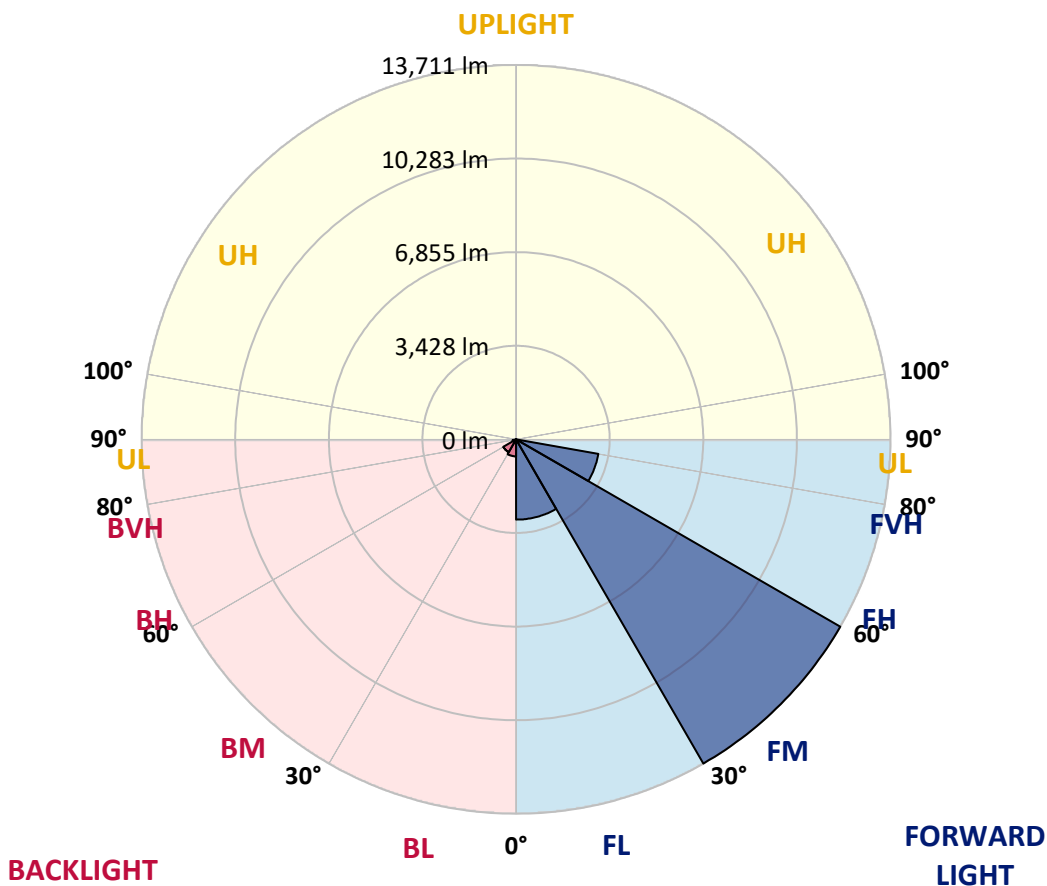
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2940.0	14.0			
FM (30°-60°)	13710.7	65.2			
FH (60°-80°)	3057.3	14.5			G2/5000
FVH (80°-90°)	12.3	0.1			G1/100
BL (0°-30°)	623.3	3.0	B2/1000		
BM (30°-60°)	542.2	2.6	B1/1000		
BH (60°-80°)	130.1	0.6	B1/500		G1/500
BVH (80°-90°)	1.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	5429.6	5429.6	5429.6	5429.6	5429.6	5429.6	5429.6	5429.6	5429.6	5429.6	5429.6
2.5°	6329.8	6299.2	6345.9	6292.0	6200.4	6123.1	6022.5	5986.6	5824.9	5672.2	5524.8
5°	7098.7	7107.7	7093.4	7017.9	6888.5	6744.8	6541.8	6496.9	6214.8	5923.7	5609.3
7.5°	7289.2	7283.8	7314.3	7343.1	7321.5	7249.7	7028.7	6983.8	6633.4	6196.8	5738.6
10°	6701.7	6705.3	6768.2	6962.2	7203.0	7452.7	7418.6	7393.4	7050.2	6505.8	5882.4
12.5°	5871.6	5903.9	5970.4	6247.1	6655.0	7222.7	7574.9	7600.0	7432.9	6845.4	6051.3
15°	5512.3	5519.4	5573.3	5740.4	6044.1	6744.8	7508.4	7578.5	7752.7	7186.8	6234.5
17.5°	5503.3	5512.3	5535.6	5609.3	5806.9	6369.3	7294.6	7416.8	7993.5	7553.3	6453.7
20°	5841.1	5835.7	5819.5	5780.0	5866.2	6245.3	7096.9	7231.7	8124.7	7910.8	6674.7
22.5°	6453.7	6446.5	6374.7	6211.2	6141.1	6358.5	6999.9	7122.1	8203.7	8228.9	6856.2
25°	7159.8	7210.1	7075.4	6827.4	6655.0	6647.8	7086.2	7172.4	8272.0	8510.9	6980.2
27.5°	7934.2	7950.4	7835.4	7556.9	7307.2	7111.3	7335.9	7400.6	8347.4	8762.5	7050.2
30°	8784.0	8778.7	8647.5	8324.1	8020.4	7738.4	7756.3	7781.5	8523.5	9050.0	7127.5
32.5°	9845.9	9869.2	9635.7	9195.5	8830.8	8440.9	8306.1	8309.7	8841.5	9420.1	7244.3
35°	11288.6	11231.1	10922.1	10295.1	9673.4	9253.0	9023.0	9003.2	9332.0	9917.8	7447.3
37.5°	12663.1	12668.5	12345.1	11655.2	10870.0	10207.0	9881.8	9827.9	10022.0	10607.7	7785.1
40°	13617.2	13635.1	13500.4	13139.2	12307.4	11369.5	10891.6	10835.9	10916.7	11480.9	8227.1
42.5°	14122.0	14172.3	14210.1	14294.5	13663.9	12821.2	12086.4	12081.0	11996.5	12476.3	8739.1
45°	14141.8	14217.3	14447.2	15024.0	15095.8	14477.8	13678.2	13557.9	13232.7	13541.7	9197.3
47.5°	13360.2	13534.5	14023.2	15165.9	15920.5	16125.3	15333.0	15259.3	14346.6	14384.3	9540.5
50°	11538.4	11719.8	12620.0	14438.2	16128.9	17433.3	17149.5	16996.7	15277.3	14941.3	9705.7
52.5°	9669.8	9835.1	10446.0	12706.2	15264.7	17844.8	18680.2	18498.8	16112.8	15135.4	9637.5
55°	6728.6	6949.6	7546.1	9497.3	13274.0	17043.5	19186.9	19149.2	16858.4	15013.2	9531.5
57.5°	3298.7	3517.9	4112.6	5855.4	9833.3	14880.2	18412.5	18612.0	17304.0	14882.0	9445.2
60°	1378.1	1467.9	1672.7	2569.3	5501.5	11245.5	16664.3	16941.0	17030.9	14704.2	9436.2
62.5°	799.5	813.9	835.5	1065.4	2139.9	6446.5	13823.8	14217.3	15595.3	14468.8	9294.3
65°	603.7	609.1	600.1	654.0	884.0	2445.3	9987.8	10523.2	13017.1	13548.9	8733.7
67.5°	495.9	495.9	472.5	483.3	555.2	916.3	5514.1	6261.5	9632.1	11135.9	7211.9
70°	395.3	404.3	393.5	379.1	397.1	506.7	1962.0	2432.7	5609.3	6575.9	4206.1
72.5°	300.0	300.0	318.0	307.2	294.7	318.0	684.5	769.0	2251.3	2741.8	1518.2
75°	231.8	239.0	251.5	240.8	222.8	188.7	328.8	348.6	679.2	637.8	339.6
77.5°	118.6	120.4	159.9	176.1	165.3	115.0	143.7	158.1	221.0	197.6	125.8
80°	71.9	75.5	89.8	138.3	109.6	61.1	59.3	62.9	104.2	89.8	52.1
82.5°	30.5	32.3	50.3	50.3	44.9	23.4	23.4	23.4	50.3	46.7	21.6
85°	0.0	0.0	9.0	7.2	7.2	9.0	9.0	9.0	12.6	18.0	10.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	5.4	5.4
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°	5429.6	5429.6	5429.6	5429.6	5429.6	5429.6	5429.6	5429.6	5429.6	5429.6	5429.6
2.5°	5429.6	5314.6	5160.1	5020.0	4831.3	4725.3	4578.0	4457.6	4355.2	4322.8	4308.5
5°	5431.4	5233.8	4903.2	4572.6	4166.5	3846.7	3517.9	3257.4	3043.6	2975.3	2957.4
7.5°	5467.3	5176.3	4640.9	4040.8	3361.6	2801.0	2299.8	1850.6	1642.2	1572.1	1557.7
10°	5515.9	5127.8	4337.2	3402.9	2427.3	1706.9	1209.2	921.7	785.2	709.7	720.5
12.5°	5578.7	5088.2	4001.2	2713.0	1606.2	937.9	664.8	557.0	528.2	513.9	506.7
15°	5663.2	5041.5	3584.4	2028.5	984.6	603.7	512.1	483.3	472.5	465.3	463.5
17.5°	5749.4	4987.6	3160.4	1426.6	654.0	501.3	460.0	445.6	438.4	433.0	431.2
20°	5841.1	4896.0	2662.7	982.8	515.7	451.0	424.0	407.8	398.9	389.9	388.1
22.5°	5880.6	4748.7	2186.6	688.1	458.2	415.0	380.9	361.1	350.4	343.2	343.2
25°	5842.9	4509.7	1694.3	522.8	416.8	375.5	341.4	319.8	310.8	303.6	303.6
27.5°	5742.2	4202.5	1236.1	433.0	371.9	334.2	301.8	282.1	274.9	271.3	271.3
30°	5630.8	3814.4	871.4	371.9	321.6	291.1	264.1	251.5	249.7	246.1	246.1
32.5°	5535.6	3451.5	600.1	327.0	283.9	253.3	235.4	230.0	231.8	228.2	230.0
35°	5483.5	3095.7	445.6	291.1	253.3	224.6	215.6	215.6	215.6	213.8	213.8
37.5°	5505.1	2745.4	362.9	265.9	226.4	204.8	195.8	199.4	203.0	203.0	203.0
40°	5612.9	2434.5	321.6	242.6	203.0	186.9	179.7	185.1	190.4	194.0	194.0
42.5°	5749.4	2183.0	291.1	222.8	186.9	168.9	165.3	170.7	176.1	179.7	179.7
45°	5835.7	1929.7	260.5	197.6	170.7	149.1	149.1	156.3	154.5	156.3	156.3
47.5°	5875.2	1728.4	230.0	170.7	145.5	129.4	131.2	134.8	131.2	134.8	134.8
50°	5778.2	1525.4	203.0	141.9	120.4	113.2	116.8	115.0	115.0	122.2	122.2
52.5°	5600.3	1374.5	179.7	120.4	102.4	100.6	104.2	97.0	98.8	98.8	97.0
55°	5469.1	1288.2	159.9	104.2	88.0	89.8	88.0	75.5	68.3	61.1	59.3
57.5°	5404.5	1254.1	145.5	93.4	79.1	79.1	71.9	52.1	39.5	30.5	27.0
60°	5390.1	1212.8	131.2	80.9	70.1	66.5	52.1	30.5	19.8	14.4	12.6
62.5°	5253.5	1112.2	118.6	64.7	61.1	53.9	32.3	18.0	10.8	7.2	5.4
65°	4806.2	914.5	106.0	50.3	46.7	39.5	19.8	10.8	5.4	1.8	0.0
67.5°	3823.4	648.6	93.4	37.7	32.3	25.2	12.6	7.2	1.8	0.0	0.0
70°	2204.5	350.4	77.3	27.0	21.6	16.2	9.0	3.6	0.0	0.0	0.0
72.5°	736.6	163.5	59.3	18.0	16.2	12.6	5.4	1.8	0.0	0.0	0.0
75°	161.7	97.0	39.5	12.6	10.8	9.0	3.6	0.0	0.0	0.0	0.0
77.5°	61.1	68.3	19.8	9.0	7.2	5.4	1.8	0.0	0.0	0.0	0.0
80°	23.4	44.9	9.0	5.4	5.4	1.8	0.0	0.0	0.0	0.0	0.0
82.5°	12.6	18.0	5.4	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.2	9.0	3.6	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.6	1.8	1.8	1.8	0.0	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)