

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: P637997

Luminaire Tested: GWS-SA4D-830-U-T2R-W-GRSBK

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P637997  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA4D-830-U-T2R-W-GRSBK  
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK  
Light Source: (64) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

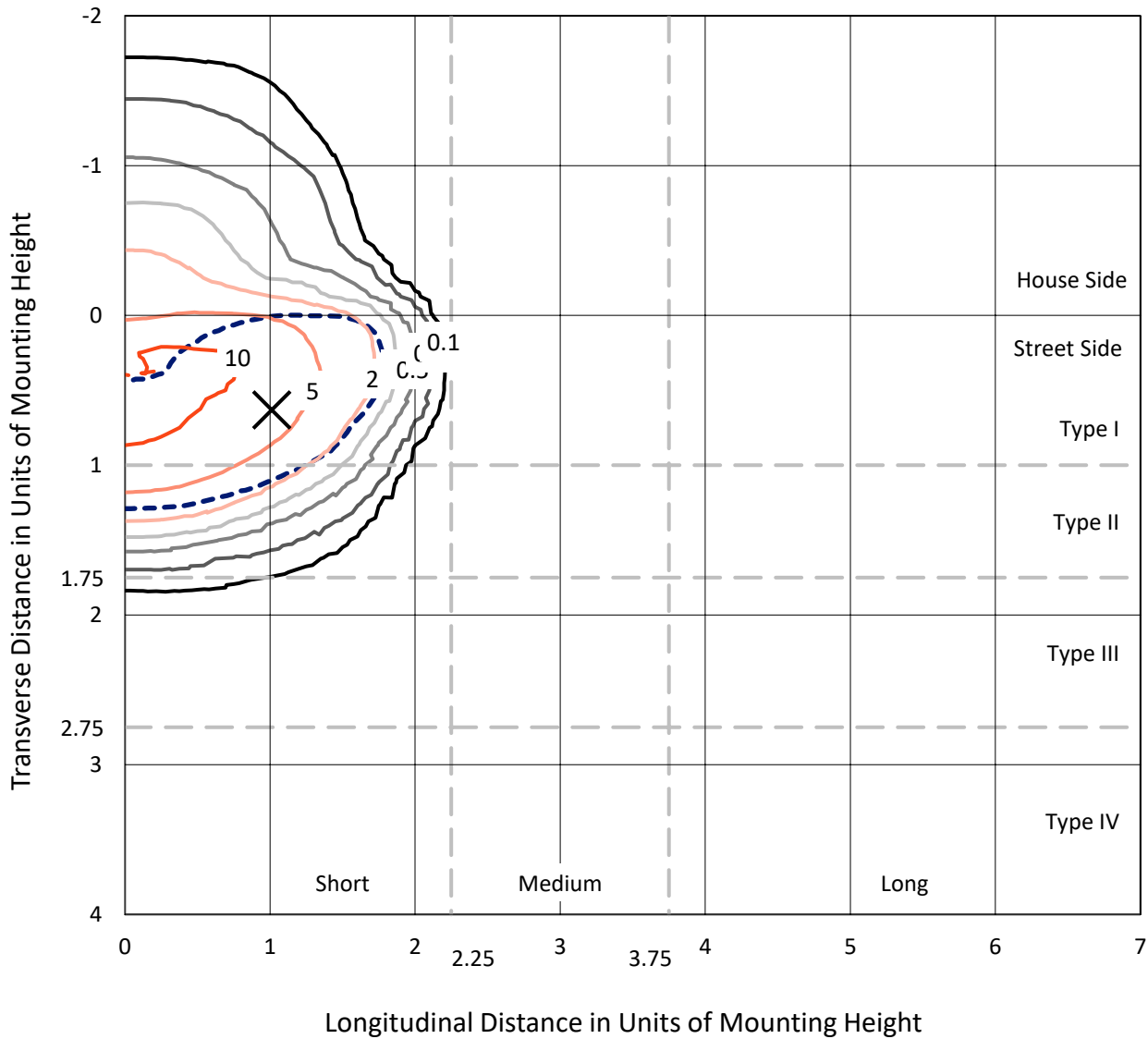
Lumens per Lamp: N/A  
Luminaire Lumens: 13040.7 lumens  
Efficiency: N/A  
Efficacy: 80.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G1  
  
Input Watts (W): 162.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
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



REPORT NUMBER: P637997  
 CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-GRSBK

### Iso-Footcandle Lines of Horizontal Illumination

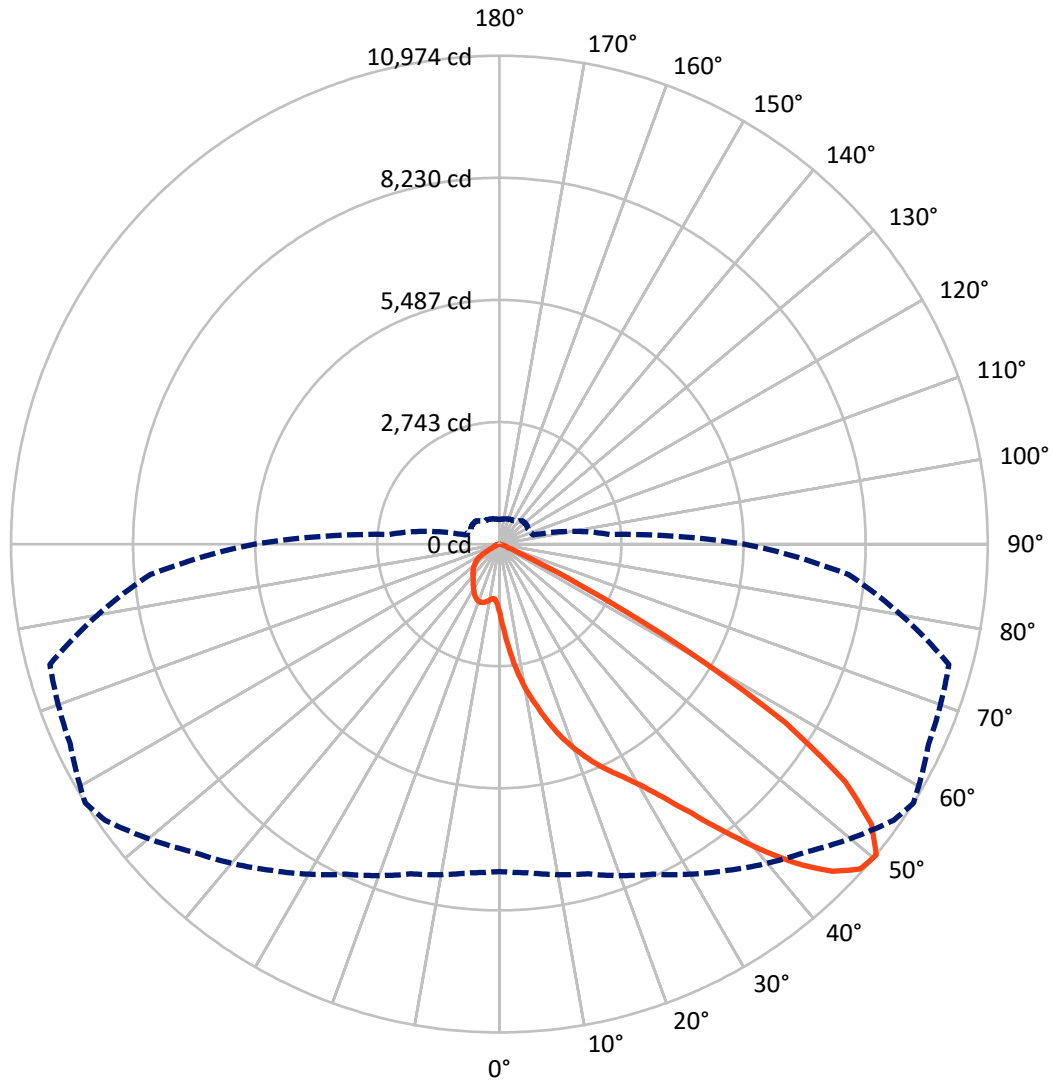
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 12 fc  
 Type II - Short - N/A

REPORT NUMBER: P637997  
CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-GRSBK

### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 50-Deg Vertical

REPORT NUMBER: P637997

CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-GRSBK

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1826.5	0.0	1826.5
	% Fixture	14.0	0.0	14.0
<b>Street Side</b>	Lumens	11214.2	0.0	11214.2
	% Fixture	86.0	0.0	86.0
<b>Total</b>	Lumens	13040.7	0.0	13040.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.0	1.5
10°-20°	763.9	5.9
20°-30°	1545.8	11.9
30°-40°	2734.8	21.0
40°-50°	3986.7	30.6
50°-60°	3195.4	24.5
60°-70°	575.7	4.4
70°-80°	45.4	0.3
80°-90°	0.0	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°	13040.7	100.0
0°-180°	13040.7	100.0

**Coefficient of Utilization**



REPORT NUMBER: P637997

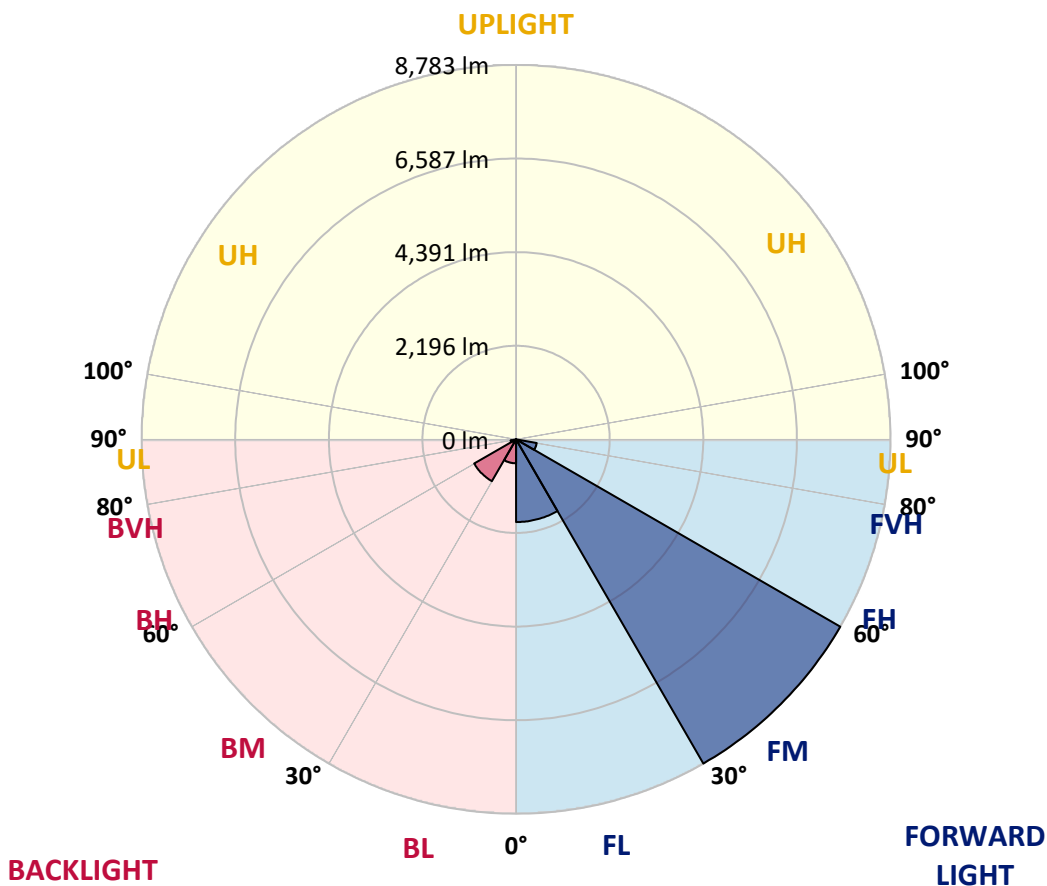
CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-GRSBK

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1940.4	14.9			
FM (30°-60°)	8782.5	67.3			
FH (60°-80°)	491.2	3.8			G0/660
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	562.3	4.3	B2/1000		
BM (30°-60°)	1134.4	8.7	B2/2500		
BH (60°-80°)	129.8	1.0	B1/500		G1/500
BVH (80°-90°)	0.0	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-G1**

Type II Short





REPORT NUMBER: P637997

CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-GRSBK

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1557.7	1557.7	1557.7	1557.7	1557.7	1557.7	1557.7	1557.7	1557.7	1557.7	1557.7
2.5°	2305.2	2268.9	2248.0	2231.2	2157.3	2040.2	1963.5	1923.1	1856.1	1743.2	1645.5
5°	3008.0	2981.5	2932.7	2899.2	2804.4	2638.4	2466.9	2398.6	2246.6	1991.4	1762.7
7.5°	3473.8	3454.2	3436.1	3391.5	3302.2	3151.6	2962.0	2890.9	2656.6	2294.0	1918.9
10°	3832.2	3816.8	3795.9	3794.5	3724.8	3589.5	3404.0	3330.1	3076.3	2623.1	2103.0
12.5°	4147.3	4134.8	4130.6	4169.6	4125.0	4024.6	3823.8	3731.8	3462.6	2959.2	2306.6
15°	4363.5	4360.7	4378.8	4455.5	4480.6	4434.6	4265.9	4166.9	3857.3	3296.7	2531.1
17.5°	4462.5	4470.9	4505.7	4638.2	4749.8	4788.8	4659.1	4575.5	4249.1	3638.3	2770.9
20°	4631.2	4628.4	4649.4	4774.9	4911.5	5051.0	5011.9	4940.8	4645.2	3999.5	3037.3
22.5°	5106.8	5066.3	5021.7	5041.2	5090.0	5253.2	5325.7	5289.4	5053.8	4370.5	3312.0
25°	5837.5	5795.7	5652.0	5512.6	5420.5	5494.4	5593.5	5611.6	5459.6	4751.2	3599.3
27.5°	6612.9	6575.2	6413.4	6204.3	5940.7	5812.4	5886.3	5922.6	5858.4	5204.4	3904.7
30°	7339.4	7289.2	7112.1	6852.7	6547.3	6350.7	6267.0	6292.1	6329.8	5741.3	4263.1
32.5°	7969.7	7932.1	7720.1	7446.8	7152.5	6947.5	6752.3	6794.1	6886.2	6398.1	4721.9
35°	8503.8	8484.3	8259.8	7987.9	7676.9	7572.3	7405.0	7413.3	7505.4	7191.6	5281.1
37.5°	8968.2	8934.7	8731.1	8478.7	8231.9	8215.2	8169.2	8173.3	8220.8	8116.2	5924.0
40°	9261.1	9230.4	9085.4	8929.2	8753.5	8756.2	8994.7	9012.8	8958.5	9024.0	6603.1
42.5°	9371.2	9348.9	9270.8	9272.2	9254.1	9336.4	9784.0	9817.5	9622.3	9736.6	7183.2
45°	9180.2	9170.4	9176.0	9376.8	9594.4	9848.2	10429.7	10488.3	10212.1	10209.3	7636.4
47.5°	8563.8	8544.3	8707.4	9049.1	9552.5	10046.2	10820.2	10910.8	10624.9	10479.9	7920.9
50°	7356.1	7411.9	7669.9	8183.1	8948.7	9774.3	10816.0	10973.6	10640.3	10456.2	7873.5
52.5°	5328.5	5317.3	5882.1	6587.8	7519.3	8904.1	10241.4	10471.5	10267.9	10223.3	7767.5
55°	2899.2	3001.0	3381.7	4316.1	5479.1	7257.1	8929.2	9431.2	9666.9	10138.2	7958.6
57.5°	1065.4	1110.0	1348.5	2009.5	2900.6	4512.7	6820.6	7577.9	8305.8	9901.2	7926.5
60°	429.5	437.9	532.7	739.1	1218.8	2296.8	4091.5	4763.7	5449.8	7579.3	6082.9
62.5°	312.4	323.5	361.2	432.3	616.4	1004.1	1764.1	2051.4	2242.4	3754.1	2996.8
65°	252.4	260.8	291.5	323.5	407.2	539.7	569.0	548.1	545.3	970.6	687.5
67.5°	209.2	217.5	239.9	262.2	292.9	269.1	195.2	205.0	167.3	165.9	135.3
70°	153.4	163.2	185.5	209.2	175.7	72.5	113.0	167.3	126.9	106.0	103.2
72.5°	115.7	122.7	143.6	136.7	51.6	27.9	75.3	121.3	97.6	78.1	76.7
75°	86.5	90.6	72.5	22.3	5.6	7.0	27.9	50.2	54.4	44.6	44.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.8	4.2	5.6	7.0	8.4
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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



REPORT NUMBER: P637997

CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-GRSBK

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1557.7	1557.7	1557.7	1557.7	1557.7	1557.7	1557.7	1557.7	1557.7	1557.7	1557.7
2.5°	1589.8	1531.2	1447.5	1377.8	1324.8	1273.2	1234.2	1195.1	1193.7	1174.2	1170.0
5°	1656.7	1550.7	1397.3	1287.2	1220.2	1179.8	1151.9	1137.9	1131.0	1124.0	1121.2
7.5°	1752.9	1600.9	1389.0	1271.8	1216.0	1189.5	1170.0	1161.6	1157.5	1151.9	1150.5
10°	1871.5	1673.4	1419.6	1301.1	1252.3	1227.2	1206.3	1193.7	1186.7	1177.0	1174.2
12.5°	2013.7	1762.7	1468.4	1349.9	1298.3	1264.8	1236.9	1218.8	1209.1	1196.5	1193.7
15°	2167.1	1858.9	1522.8	1394.5	1333.2	1289.9	1255.1	1227.2	1209.1	1193.7	1189.5
17.5°	2326.1	1956.5	1571.6	1425.2	1349.9	1298.3	1248.1	1210.5	1188.1	1168.6	1163.0
20°	2504.6	2056.9	1603.7	1430.8	1344.3	1276.0	1217.4	1170.0	1147.7	1121.2	1115.6
22.5°	2691.4	2150.4	1617.7	1418.2	1313.6	1234.2	1171.4	1122.6	1090.5	1062.6	1054.3
25°	2872.7	2234.0	1610.7	1383.4	1267.6	1175.6	1111.4	1061.2	1026.4	998.5	991.5
27.5°	3065.2	2303.8	1585.6	1331.8	1204.9	1111.4	1050.1	1006.9	974.8	944.1	937.1
30°	3281.3	2367.9	1545.1	1269.0	1131.0	1045.9	998.5	969.2	934.3	902.3	892.5
32.5°	3542.1	2425.1	1486.6	1193.7	1065.4	988.7	962.2	939.9	899.5	866.0	859.0
35°	3840.5	2472.5	1412.7	1115.6	1001.3	952.5	946.9	917.6	864.6	825.6	817.2
37.5°	4186.4	2518.5	1324.8	1038.9	953.9	935.7	937.1	886.9	822.8	775.4	769.8
40°	4558.7	2564.5	1227.2	972.0	910.6	926.0	913.4	842.3	737.7	691.7	686.1
42.5°	4946.4	2614.7	1128.2	909.2	874.4	888.3	870.2	753.0	677.7	654.0	651.2
45°	5296.4	2674.7	1020.8	846.5	838.1	833.9	803.2	681.9	649.9	633.1	631.7
47.5°	5548.8	2664.9	906.4	786.5	799.1	785.1	691.7	648.5	622.0	599.6	594.1
50°	5502.8	2494.8	787.9	719.6	748.9	736.3	622.0	609.4	585.7	562.0	553.6
52.5°	5385.7	2263.3	684.7	648.5	694.5	665.2	574.5	562.0	541.1	510.4	500.6
55°	5448.4	2045.8	603.8	591.3	638.7	550.8	521.6	502.0	479.7	446.2	442.1
57.5°	5246.2	1669.3	485.3	493.7	564.8	470.0	457.4	426.7	389.1	366.8	364.0
60°	3631.4	896.7	304.0	313.8	408.6	394.7	410.0	382.1	336.1	315.2	311.0
62.5°	1667.9	359.8	165.9	159.0	214.8	267.7	351.4	348.6	291.5	258.0	255.2
65°	404.4	164.6	118.5	111.6	121.3	160.4	228.7	274.7	235.7	196.6	192.4
67.5°	131.1	133.9	108.8	101.8	107.4	119.9	136.7	152.0	150.6	138.1	135.3
70°	104.6	121.3	100.4	92.0	92.0	96.2	92.0	73.9	64.1	69.7	72.5
72.5°	78.1	92.0	79.5	71.1	68.3	66.9	57.2	41.8	29.3	26.5	25.1
75°	46.0	51.6	48.8	41.8	39.0	34.9	27.9	18.1	9.8	7.0	4.2
77.5°	8.4	9.8	11.2	8.4	7.0	5.6	4.2	1.4	0.0	0.0	0.0
80°	0.0	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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)