

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: P638712

Luminaire Tested: GWS-SA4F-735-U-T2R-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638712
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-SA4F-735-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) 3500K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22495.7 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G1

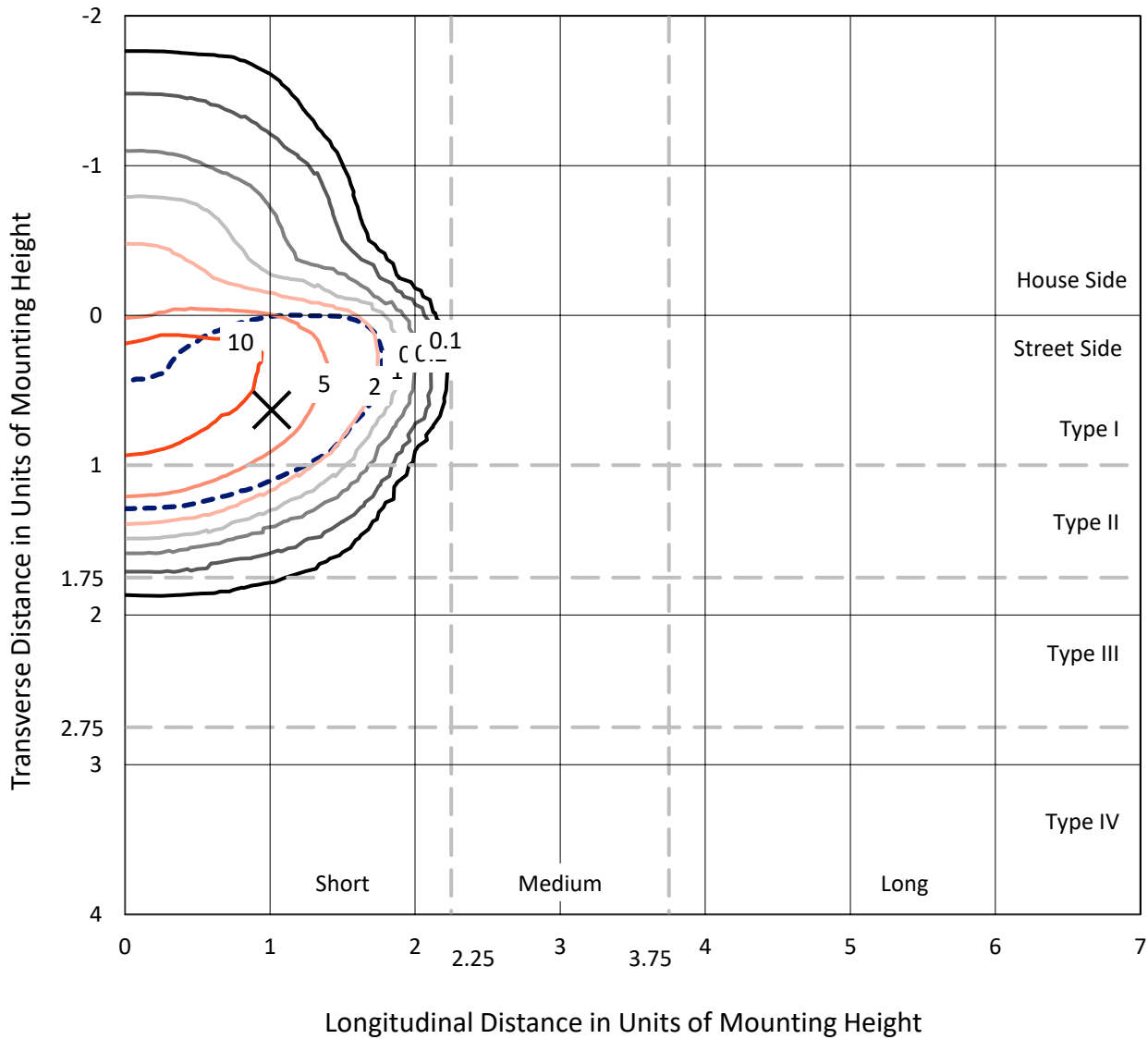
Input Watts (W): 225.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

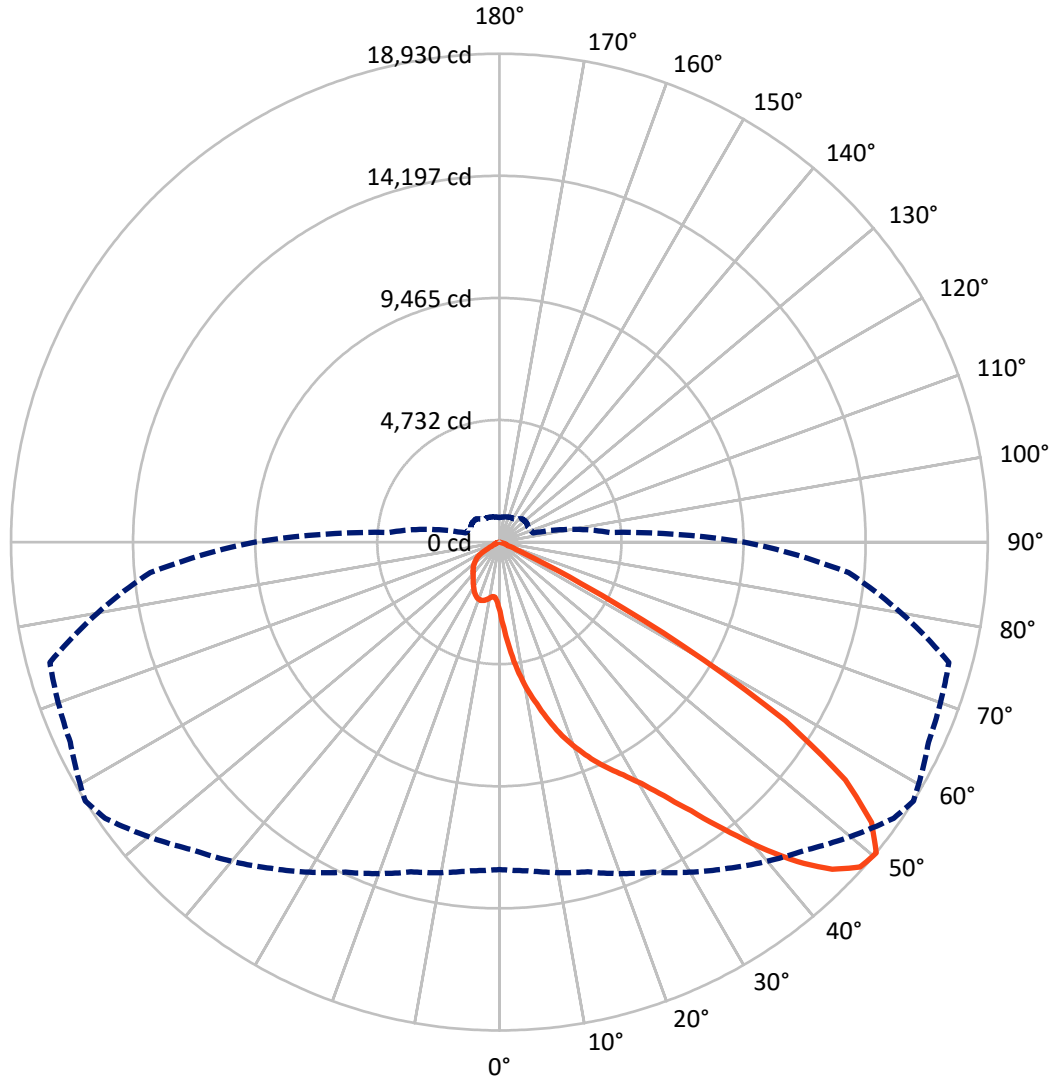
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3150.8	0.0	3150.8
	% Fixture	14.0	0.0	14.0
Street Side	Lumens	19344.9	0.0	19344.9
	% Fixture	86.0	0.0	86.0
Total	Lumens	22495.7	0.0	22495.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	332.9	1.5
10°-20°	1317.8	5.9
20°-30°	2666.6	11.9
30°-40°	4717.6	21.0
40°-50°	6877.2	30.6
50°-60°	5512.3	24.5
60°-70°	993.1	4.4
70°-80°	78.3	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°	22495.7	100.0
0°-180°	22495.7	100.0

Coefficient of Utilization



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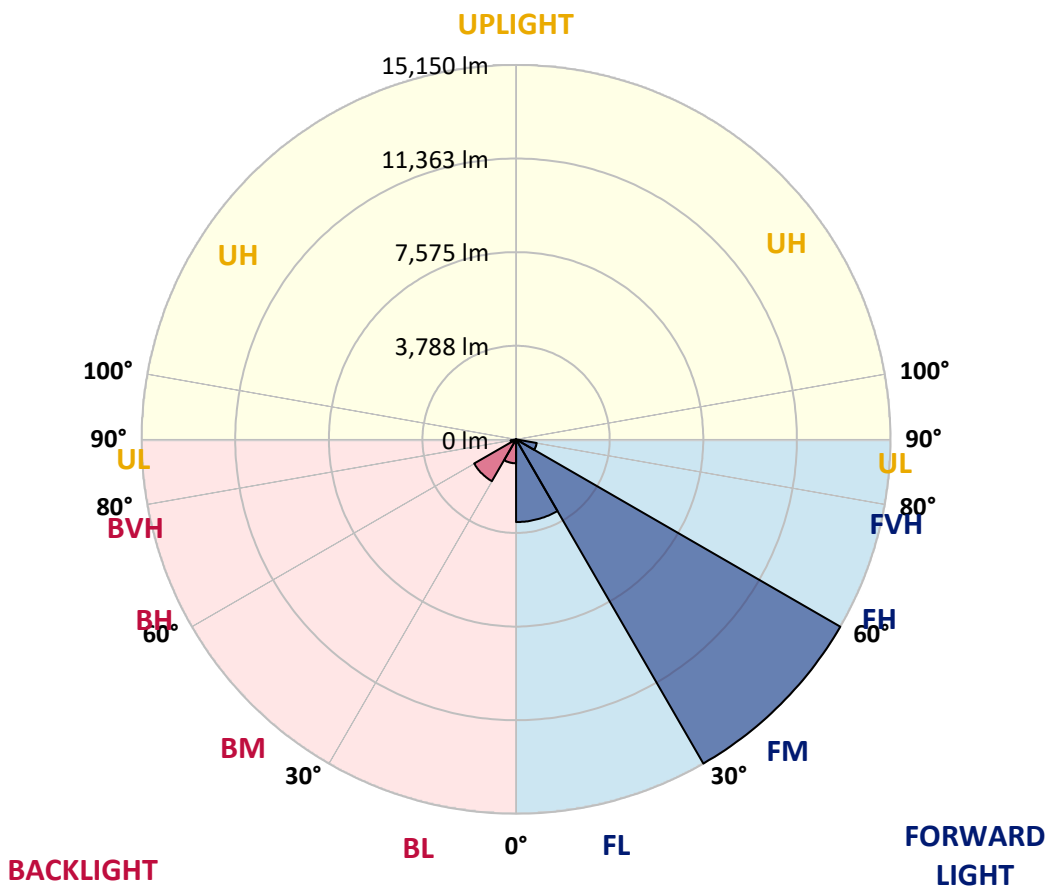
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3347.3	14.9			
FM (30°-60°)	15150.2	67.3			
FH (60°-80°)	847.4	3.8			G1/1800
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	970.0	4.3	B2/1000		
BM (30°-60°)	1956.8	8.7	B2/2500		
BH (60°-80°)	223.9	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1
2.5°	3976.5	3913.9	3877.9	3849.0	3721.5	3519.4	3387.1	3317.3	3201.9	3007.0	2838.6
5°	5188.9	5143.2	5059.0	5001.3	4837.7	4551.4	4255.5	4137.7	3875.4	3435.2	3040.7
7.5°	5992.4	5958.7	5927.4	5850.5	5696.5	5436.7	5109.5	4986.8	4582.7	3957.2	3310.1
10°	6610.6	6584.2	6548.1	6545.7	6425.4	6192.1	5872.1	5744.6	5306.8	4525.0	3627.7
12.5°	7154.3	7132.7	7125.4	7192.8	7115.8	6942.6	6596.2	6437.4	5973.1	5104.7	3978.9
15°	7527.2	7522.4	7553.6	7685.9	7729.2	7649.9	7358.8	7188.0	6653.9	5686.9	4366.2
17.5°	7698.0	7712.4	7772.5	8001.1	8193.5	8260.9	8037.2	7892.8	7329.9	6276.3	4780.0
20°	7989.0	7984.2	8020.3	8236.8	8472.6	8713.1	8645.8	8523.1	8013.1	6899.3	5239.4
22.5°	8809.4	8739.6	8662.6	8696.3	8780.5	9062.0	9187.0	9124.5	8718.0	7539.2	5713.3
25°	10069.9	9997.7	9750.0	9509.4	9350.6	9478.1	9648.9	9680.2	9418.0	8195.9	6208.9
27.5°	11407.4	11342.5	11063.4	10702.6	10247.9	10026.6	10154.1	10216.6	10106.0	8977.8	6735.7
30°	12660.8	12574.2	12268.6	11821.2	11294.4	10955.2	10810.8	10854.1	10919.1	9903.9	7354.0
32.5°	13748.1	13683.1	13317.5	12846.0	12338.4	11984.8	11648.0	11720.2	11878.9	11037.0	8145.4
35°	14669.4	14635.8	14248.5	13779.4	13242.9	13062.5	12773.8	12788.3	12947.0	12405.8	9110.1
37.5°	15470.5	15412.8	15061.6	14626.1	14200.3	14171.5	14092.1	14099.3	14181.1	14000.7	10219.1
40°	15975.7	15922.8	15672.6	15403.2	15100.0	15104.9	15516.2	15547.5	15453.7	15566.7	11390.6
42.5°	16165.7	16127.2	15992.5	15994.9	15963.7	16105.6	16877.8	16935.5	16598.7	16796.0	12391.3
45°	15836.2	15819.3	15829.0	16175.4	16550.6	16988.5	17991.6	18092.6	17616.3	17611.5	13173.2
47.5°	14772.9	14739.2	15020.7	15610.0	16478.5	17330.1	18665.2	18821.5	18328.4	18078.2	13663.9
50°	12689.6	12785.8	13230.9	14116.2	15436.8	16861.0	18658.0	18929.8	18354.8	18037.3	13582.1
52.5°	9191.9	9172.6	10146.9	11364.1	12971.1	15359.9	17666.8	18063.8	17712.5	17635.6	13399.3
55°	5001.3	5176.9	5833.6	7445.4	9451.7	12518.8	15403.2	16269.2	16675.7	17488.8	13728.8
57.5°	1837.9	1914.9	2326.2	3466.5	5003.7	7784.6	11765.9	13072.1	14327.8	17079.9	13673.5
60°	740.9	755.4	918.9	1275.0	2102.5	3962.0	7058.1	8217.6	9401.1	13074.5	10493.3
62.5°	538.9	558.1	623.1	745.7	1063.3	1732.0	3043.1	3538.7	3868.2	6475.9	5169.7
65°	435.4	449.9	502.8	558.1	702.4	931.0	981.5	945.4	940.6	1674.3	1186.0
67.5°	360.8	375.3	413.8	452.3	505.2	464.3	336.8	353.6	288.7	286.3	233.3
70°	264.6	281.5	319.9	360.8	303.1	125.1	194.9	288.7	218.9	182.8	178.0
72.5°	199.7	211.7	247.8	235.8	89.0	48.1	129.9	209.3	168.4	134.7	132.3
75°	149.1	156.4	125.1	38.5	9.6	12.0	48.1	86.6	93.8	77.0	77.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	4.8	7.2	9.6	12.0	14.4
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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1
2.5°	2742.4	2641.4	2497.0	2376.7	2285.3	2196.3	2129.0	2061.6	2059.2	2025.5	2018.3
5°	2857.9	2675.0	2410.4	2220.4	2104.9	2035.2	1987.0	1963.0	1951.0	1938.9	1934.1
7.5°	3023.9	2761.6	2396.0	2193.9	2097.7	2052.0	2018.3	2003.9	1996.7	1987.0	1984.6
10°	3228.3	2886.7	2448.9	2244.4	2160.2	2116.9	2080.9	2059.2	2047.2	2030.3	2025.5
12.5°	3473.7	3040.7	2533.1	2328.6	2239.6	2181.9	2133.8	2102.5	2085.7	2064.0	2059.2
15°	3738.3	3206.7	2626.9	2405.6	2299.8	2225.2	2165.1	2116.9	2085.7	2059.2	2052.0
17.5°	4012.6	3375.1	2711.1	2458.5	2328.6	2239.6	2153.0	2088.1	2049.6	2015.9	2006.3
20°	4320.5	3548.3	2766.5	2468.2	2319.0	2201.1	2100.1	2018.3	1979.8	1934.1	1924.5
22.5°	4642.8	3709.5	2790.5	2446.5	2266.1	2129.0	2020.7	1936.5	1881.2	1833.1	1818.6
25°	4955.6	3853.8	2778.5	2386.4	2186.7	2027.9	1917.3	1830.7	1770.5	1722.4	1710.4
27.5°	5287.5	3974.1	2735.2	2297.4	2078.5	1917.3	1811.4	1736.9	1681.5	1628.6	1616.6
30°	5660.4	4084.7	2665.4	2189.1	1951.0	1804.2	1722.4	1671.9	1611.8	1556.4	1539.6
32.5°	6110.3	4183.4	2564.4	2059.2	1837.9	1705.6	1659.9	1621.4	1551.6	1493.9	1481.9
35°	6625.1	4265.2	2436.9	1924.5	1727.2	1643.0	1633.4	1582.9	1491.5	1424.1	1409.7
37.5°	7221.7	4344.5	2285.3	1792.2	1645.4	1614.2	1616.6	1530.0	1419.3	1337.5	1327.9
40°	7864.0	4423.9	2116.9	1676.7	1570.9	1597.3	1575.7	1453.0	1272.6	1193.2	1183.6
42.5°	8532.7	4510.5	1946.1	1568.5	1508.3	1532.4	1501.1	1299.0	1169.1	1128.2	1123.4
45°	9136.5	4614.0	1760.9	1460.2	1445.8	1438.6	1385.6	1176.3	1121.0	1092.1	1089.7
47.5°	9571.9	4597.1	1563.7	1356.8	1378.4	1354.4	1193.2	1118.6	1072.9	1034.4	1024.8
50°	9492.6	4303.6	1359.2	1241.3	1291.8	1270.2	1072.9	1051.3	1010.4	969.5	955.0
52.5°	9290.5	3904.3	1181.2	1118.6	1198.0	1147.5	991.1	969.5	933.4	880.5	863.6
55°	9398.7	3529.0	1041.6	1020.0	1101.8	950.2	899.7	866.0	827.5	769.8	762.6
57.5°	9049.9	2879.5	837.2	851.6	974.3	810.7	789.0	736.1	671.2	632.7	627.9
60°	6264.2	1546.8	524.4	541.3	704.8	680.8	707.3	659.1	579.8	543.7	536.5
62.5°	2877.1	620.6	286.3	274.2	370.5	461.9	606.2	601.4	502.8	445.0	440.2
65°	697.6	283.9	204.5	192.4	209.3	276.6	394.5	473.9	406.5	339.2	332.0
67.5°	226.1	230.9	187.6	175.6	185.2	206.9	235.8	262.2	259.8	238.2	233.3
70°	180.4	209.3	173.2	158.8	158.8	166.0	158.8	127.5	110.7	120.3	125.1
72.5°	134.7	158.8	137.1	122.7	117.9	115.5	98.6	72.2	50.5	45.7	43.3
75°	79.4	89.0	84.2	72.2	67.4	60.1	48.1	31.3	16.8	12.0	7.2
77.5°	14.4	16.8	19.2	14.4	12.0	9.6	7.2	2.4	0.0	0.0	0.0
80°	0.0	2.4	2.4	2.4	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)