

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P300729

Luminaire Tested: **GLNA-AF-02-LED-E1-AFL-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300729
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-02-LED-E1-AFL-600-HSS
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5966.4 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

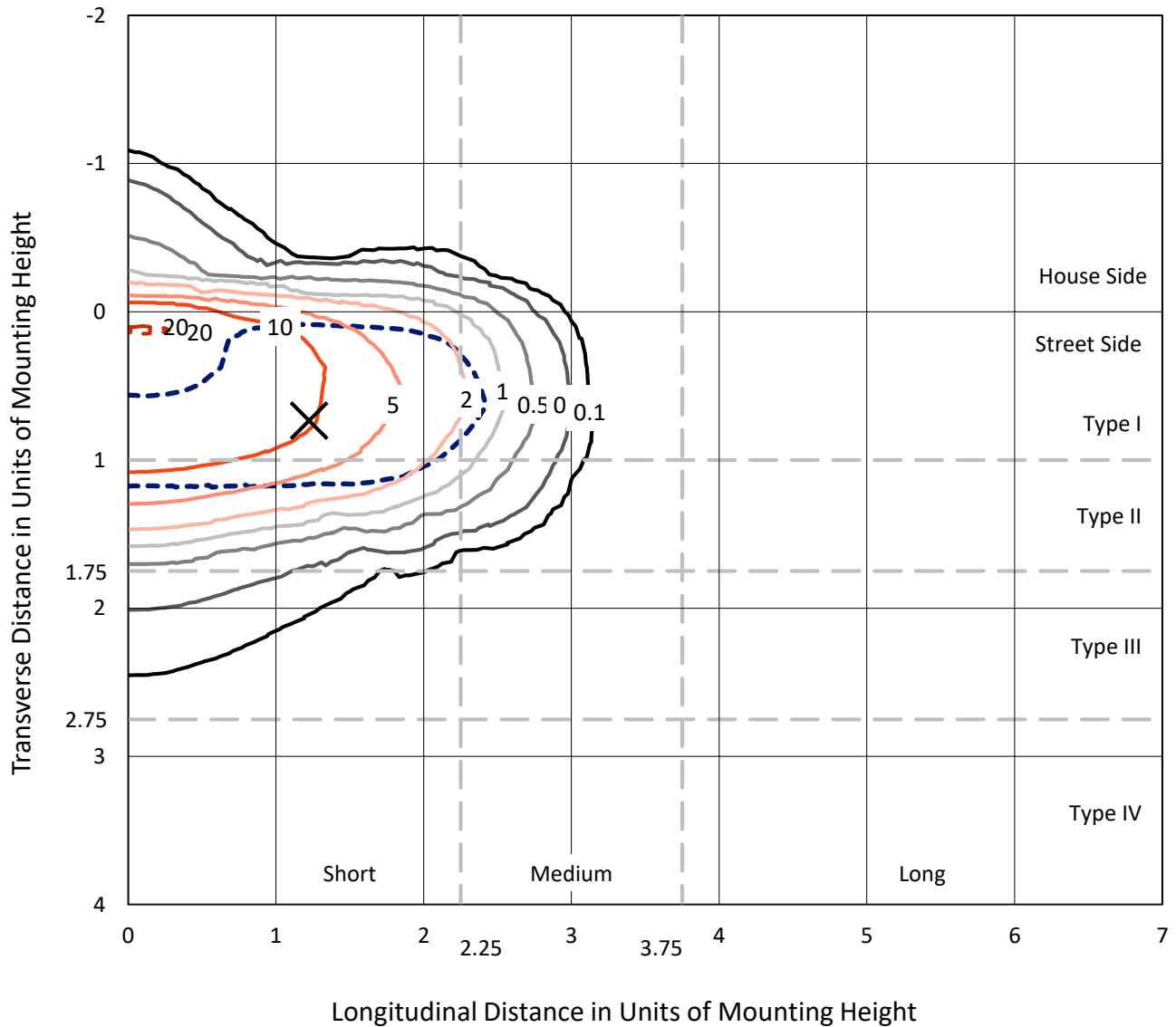


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Iso-Footcandle Lines of Horizontal Illumination

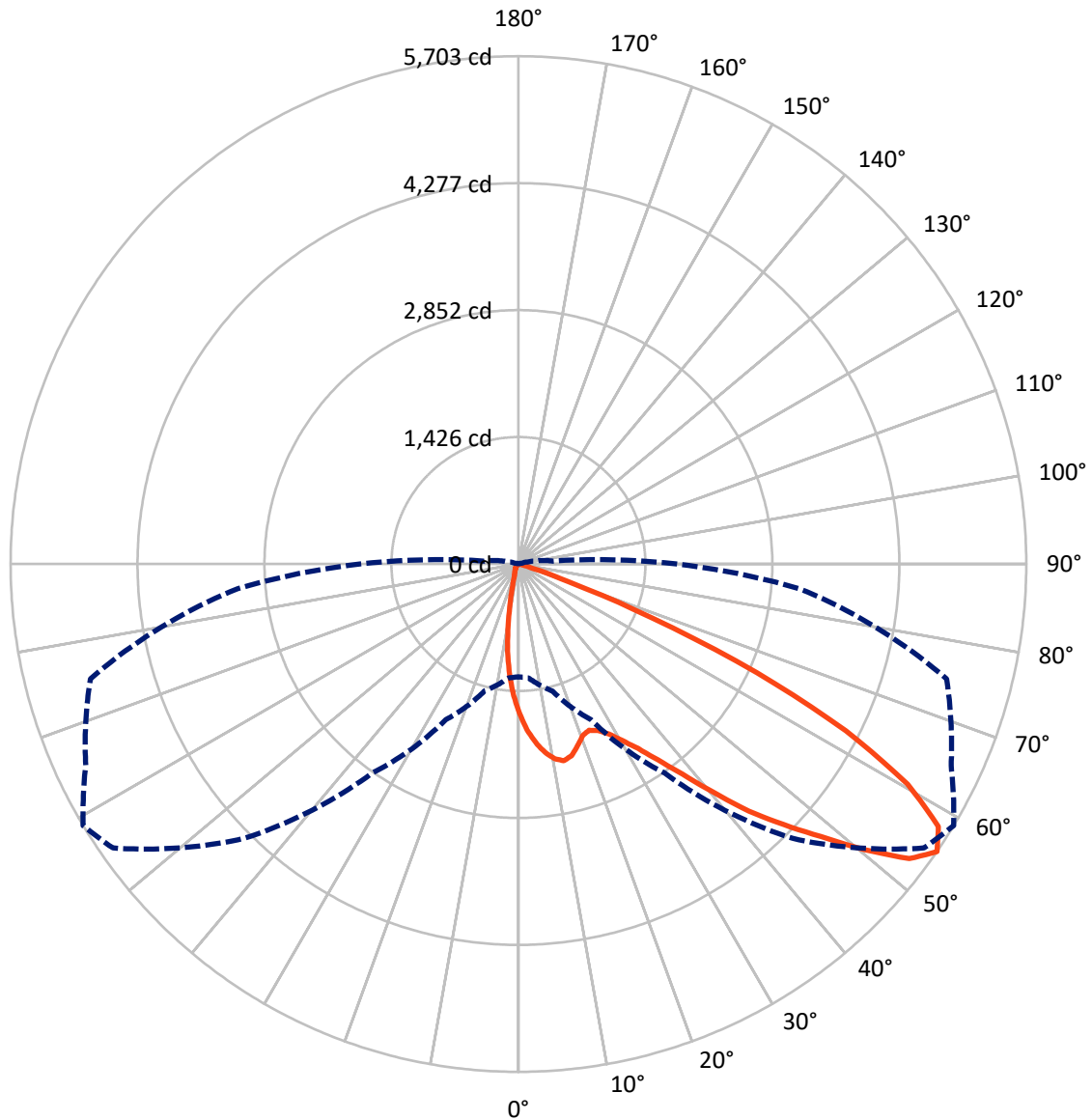
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 20.9 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	333.3	0.0	333.3
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	5633.1	0.0	5633.1
	% Fixture	94.4	0.0	94.4
Total	Lumens	5966.4	0.0	5966.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.7	2.4
10°-20°	336.8	5.6
20°-30°	573.1	9.6
30°-40°	985.7	16.5
40°-50°	1521.8	25.5
50°-60°	1529.9	25.6
60°-70°	784.5	13.1
70°-80°	85.0	1.4
80°-90°	8.9	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°	5966.4	100.0
0°-180°	5966.4	100.0

Coefficient of Utilization



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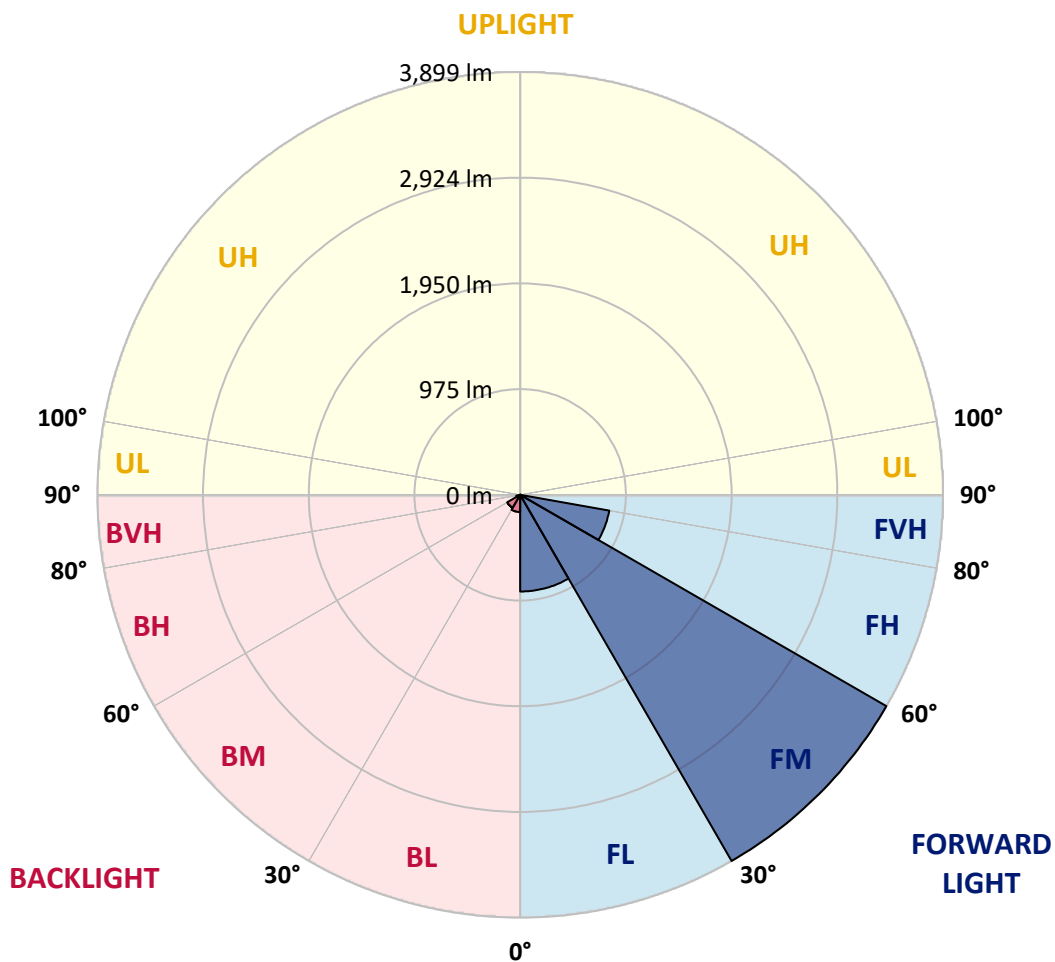
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	891.6	14.9			
FM	(30°-60°)	3899.0	65.3			
FH	(60°-80°)	833.8	14.0			G1/1800
FVH	(80°-90°)	8.7	0.1			G0/10
BL	(0°-30°)	159.1	2.7	B1/500		
BM	(30°-60°)	138.3	2.3	B0/220		
BH	(60°-80°)	35.7	0.6	B0/110		G0/110
BVH	(80°-90°)	0.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1679.5	1679.5	1679.5	1679.5	1679.5	1679.5	1679.5	1679.5	1679.5	1679.5	1679.5
2.5°	1987.3	1966.1	1959.8	1955.6	1936.2	1911.9	1878.8	1863.3	1831.6	1780.6	1717.9
5°	2169.3	2165.4	2151.3	2143.6	2122.8	2088.3	2035.5	2010.1	1959.8	1873.9	1761.6
7.5°	2089.7	2114.0	2133.4	2165.8	2206.6	2205.2	2160.8	2134.4	2078.1	1964.7	1810.1
10°	1782.3	1802.0	1833.7	1907.3	2057.3	2189.7	2241.8	2222.8	2177.7	2048.2	1857.0
12.5°	1722.1	1720.0	1725.6	1747.1	1825.6	2014.4	2228.1	2266.5	2257.3	2124.6	1901.3
15°	1754.2	1751.7	1751.0	1758.4	1777.4	1857.0	2124.9	2235.1	2305.9	2195.3	1939.0
17.5°	1843.9	1833.4	1827.8	1821.8	1816.1	1835.8	2001.0	2147.5	2313.3	2257.3	1970.4
20°	1997.8	1980.2	1959.4	1925.6	1893.9	1884.1	1948.9	2057.3	2286.9	2304.5	1990.8
22.5°	2191.1	2168.6	2132.7	2071.1	2006.6	1969.3	1974.6	2028.8	2247.5	2355.9	2000.3
25°	2408.4	2379.5	2331.6	2246.0	2151.3	2085.1	2050.6	2069.6	2229.5	2416.1	2011.2
27.5°	2641.1	2609.1	2546.4	2429.8	2322.5	2233.0	2162.6	2160.1	2260.1	2495.0	2028.8
30°	2871.7	2866.8	2785.1	2661.9	2519.6	2410.8	2309.4	2296.4	2345.7	2604.1	2063.7
32.5°	3179.5	3142.5	3042.5	2915.7	2751.7	2621.0	2501.0	2470.7	2477.0	2731.2	2117.5
35°	3567.5	3527.0	3386.1	3211.2	3027.7	2873.5	2740.7	2699.6	2684.1	2939.3	2208.4
37.5°	3818.2	3817.5	3729.1	3550.9	3354.1	3184.0	3039.7	2991.4	2960.1	3190.7	2349.2
40°	3824.9	3841.4	3853.0	3851.3	3711.1	3554.5	3426.3	3366.8	3293.9	3526.6	2531.2
42.5°	3619.6	3662.2	3764.7	3938.6	4021.7	3959.4	3851.3	3792.8	3684.4	3886.1	2753.1
45°	3342.1	3371.7	3550.9	3871.3	4190.0	4360.8	4278.4	4173.8	4030.8	4261.1	2952.0
47.5°	3217.8	3223.1	3339.0	3690.7	4202.7	4689.6	4739.6	4569.6	4345.6	4563.2	3107.6
50°	2846.4	2855.9	3015.7	3377.7	4054.1	4844.9	5203.0	5041.7	4688.9	4796.0	3164.3
52.5°	2145.3	2158.7	2361.5	2863.3	3645.6	4778.7	5534.7	5495.6	5065.0	4909.7	3167.5
55°	1265.8	1283.4	1477.1	1927.4	2867.5	4357.6	5559.3	5703.0	5361.8	4976.9	3162.6
57.5°	591.2	603.5	714.4	992.9	1783.4	3443.9	5188.2	5560.7	5525.5	5012.5	3197.4
60°	314.1	317.6	344.4	429.9	806.0	2183.7	4463.9	5021.3	5376.2	5061.8	3240.0
62.5°	240.1	241.2	239.8	250.0	338.7	969.3	3374.2	4128.0	4775.2	5024.8	3192.8
65°	208.1	209.9	200.0	197.5	217.2	345.8	2004.5	2942.5	3752.3	4525.9	2871.4
67.5°	186.6	187.3	175.3	165.1	168.7	187.0	790.8	1610.9	2483.7	3317.5	2081.3
70°	171.8	171.1	158.1	141.9	137.3	127.8	251.4	590.5	1186.9	1682.3	967.9
72.5°	152.1	152.5	146.1	125.0	114.1	89.4	116.5	172.2	354.2	458.4	226.8
75°	134.9	133.1	125.3	112.0	94.0	58.8	57.7	76.8	109.2	108.4	48.9
77.5°	97.5	95.8	98.2	91.9	72.2	38.0	28.9	37.0	44.4	43.0	13.7
80°	71.5	70.4	63.4	76.4	63.7	26.1	18.0	19.7	22.9	19.4	4.2
82.5°	48.9	48.6	44.7	42.3	36.3	15.8	11.3	12.3	14.8	10.9	2.1
85°	7.7	8.8	32.4	25.7	21.5	7.0	7.7	8.5	9.9	6.0	0.7
87.5°	0.0	0.0	15.1	13.4	4.2	2.8	4.6	4.9	4.9	3.2	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°	1679.5	1679.5	1679.5	1679.5	1679.5	1679.5	1679.5	1679.5	1679.5	1679.5	1679.5
2.5°	1685.9	1650.6	1585.5	1518.3	1455.9	1381.6	1330.6	1292.2	1247.8	1235.9	1261.9
5°	1697.5	1630.9	1490.8	1338.3	1195.0	1036.2	914.8	818.6	731.7	702.1	728.8
7.5°	1715.8	1616.8	1388.3	1137.3	888.0	640.1	470.4	358.8	287.7	266.5	277.8
10°	1734.1	1596.4	1269.7	899.3	558.4	311.6	202.8	162.0	146.8	143.7	145.4
12.5°	1749.2	1569.0	1125.0	639.4	298.6	166.9	132.7	126.1	123.9	123.9	124.6
15°	1758.4	1527.4	953.5	406.7	171.8	126.1	115.8	113.7	113.7	114.1	114.8
17.5°	1757.3	1474.6	765.8	246.1	128.5	111.6	105.6	103.9	103.5	104.2	104.6
20°	1744.3	1405.6	577.4	162.3	112.0	101.8	95.8	92.6	92.3	93.0	93.7
22.5°	1719.7	1320.4	413.0	125.0	101.1	92.3	84.9	82.0	82.0	82.7	83.4
25°	1689.7	1216.2	282.4	106.0	91.2	82.0	75.0	72.5	73.2	75.0	75.3
27.5°	1652.4	1098.9	191.9	90.8	79.2	71.8	66.5	64.8	66.5	69.0	69.7
30°	1620.4	976.7	137.0	78.5	67.3	62.0	58.8	58.8	61.3	65.8	66.9
32.5°	1595.7	858.4	105.6	69.4	58.4	53.9	52.1	53.9	57.7	62.3	63.4
35°	1592.5	760.9	89.4	62.0	52.1	47.5	46.8	50.0	53.9	57.4	58.1
37.5°	1616.8	670.8	80.6	56.0	46.5	42.3	41.5	45.4	49.3	53.5	54.6
40°	1663.0	600.0	74.3	50.4	41.9	37.3	35.9	38.7	44.0	49.6	51.1
42.5°	1722.8	541.5	67.3	44.7	37.3	31.0	29.2	32.4	38.0	44.0	45.8
45°	1779.9	491.2	59.5	38.4	31.3	23.9	23.2	27.5	30.3	36.3	37.7
47.5°	1811.2	446.8	52.8	31.3	24.3	19.4	19.4	20.4	23.2	30.3	31.7
50°	1800.6	411.3	45.8	23.2	16.9	14.8	14.8	14.4	18.7	24.3	25.4
52.5°	1779.5	390.8	39.4	18.0	11.6	10.6	9.5	10.6	13.0	15.5	15.8
55°	1776.3	387.3	33.1	14.4	8.1	7.0	5.3	5.3	5.3	4.9	4.2
57.5°	1801.0	392.9	27.8	11.6	6.0	4.6	2.8	0.0	0.0	0.0	0.0
60°	1826.3	398.9	23.9	8.1	4.2	2.5	0.4	0.0	0.0	0.0	0.0
62.5°	1784.1	385.5	20.1	4.9	3.2	1.1	0.0	0.0	0.0	0.0	0.0
65°	1567.2	328.2	15.8	3.5	2.1	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	1114.7	219.7	10.6	2.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0
70°	508.8	91.9	6.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	108.8	28.5	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	22.2	20.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	7.0	32.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	4.2	23.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.7	3.5	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)