

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: P300669

Luminaire Tested: **GLNA-AF-02-LED-E1-AFL-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300669
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-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7316.9 lumens
Efficiency: N/A
Efficacy: 86.1 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): 85
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

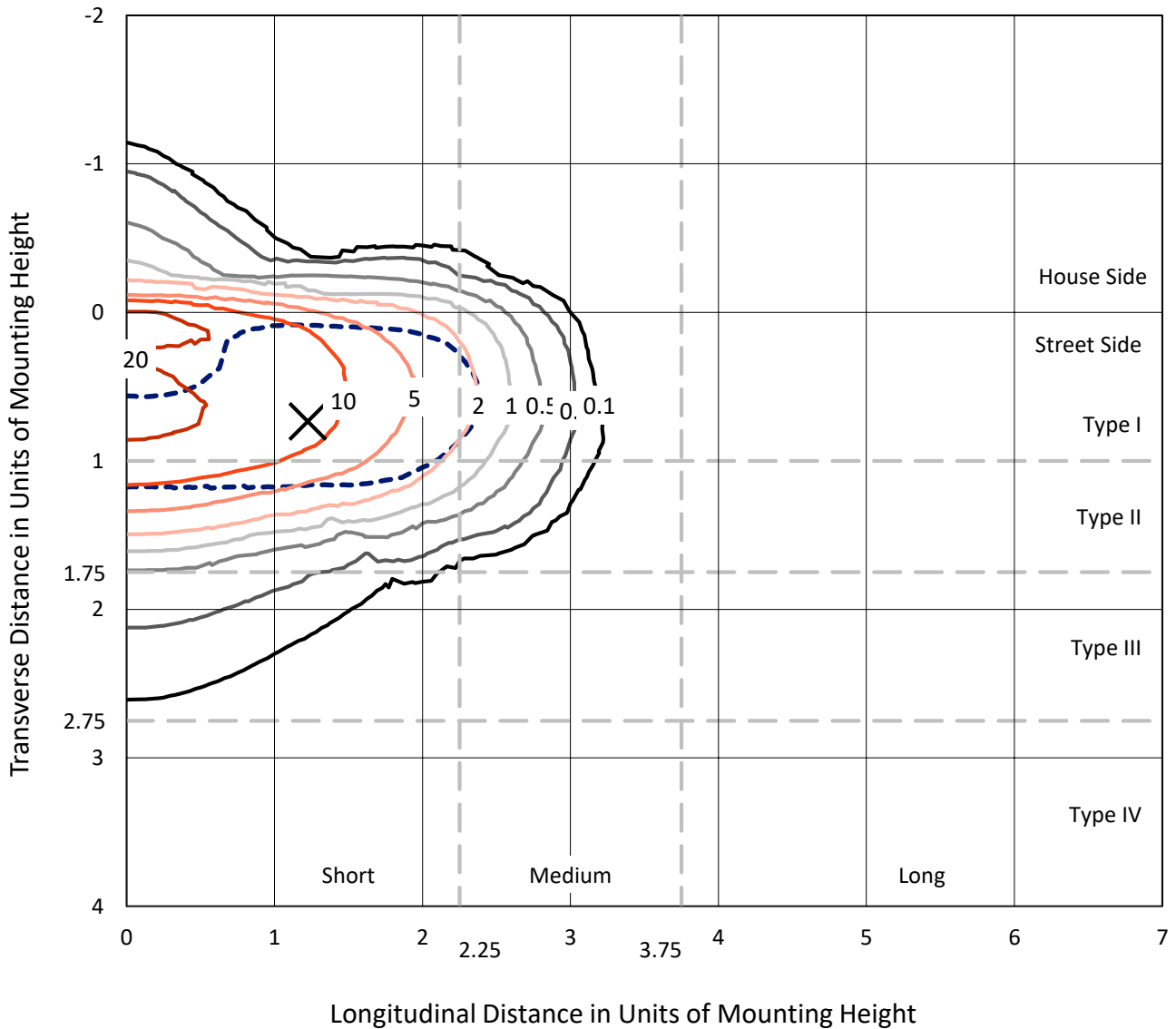


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

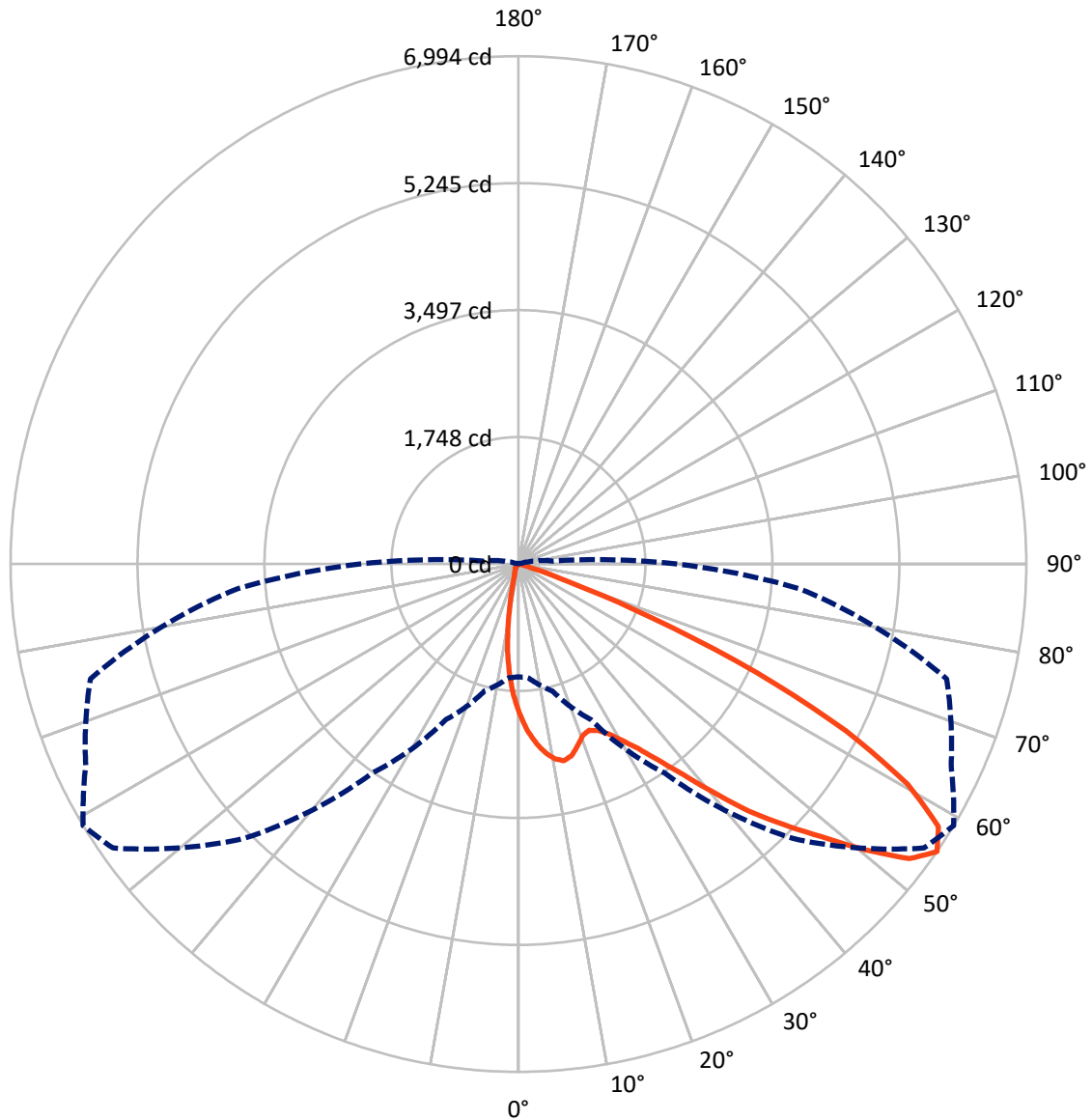


Based on 10 foot mounting height. Maximum calculated value = 25.6 fc
 Type II - Short - Full Cutoff

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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	408.7	0.0	408.7
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	6908.2	0.0	6908.2
	% Fixture	94.4	0.0	94.4
Total	Lumens	7316.9	0.0	7316.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.5	2.4
10°-20°	413.1	5.6
20°-30°	702.9	9.6
30°-40°	1208.8	16.5
40°-50°	1866.2	25.5
50°-60°	1876.2	25.6
60°-70°	962.1	13.1
70°-80°	104.3	1.4
80°-90°	10.9	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°	7316.9	100.0
0°-180°	7316.9	100.0

Coefficient of Utilization



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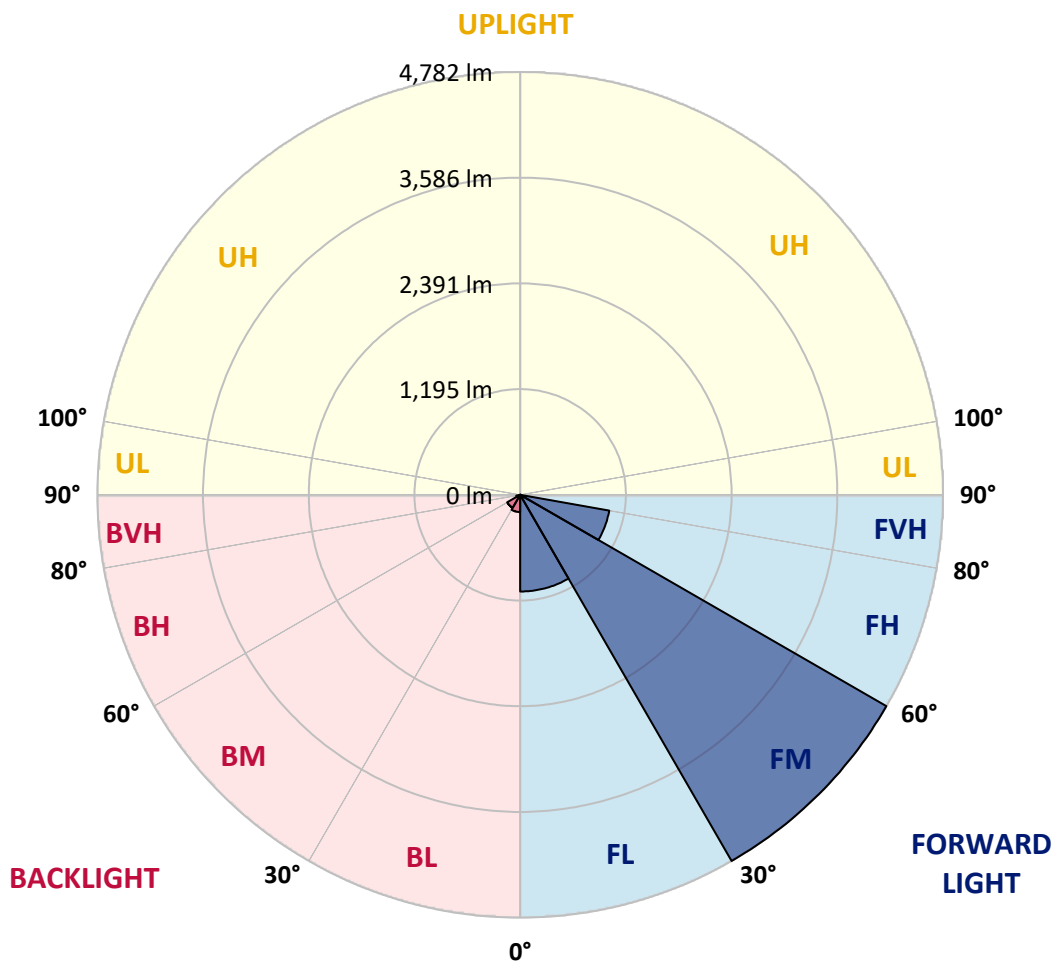
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1093.4	14.9			
FM	(30°-60°)	4781.6	65.3			
FH	(60°-80°)	1022.6	14.0			G1/1800
FVH	(80°-90°)	10.7	0.1			G1/100
BL	(0°-30°)	195.1	2.7	B1/500		
BM	(30°-60°)	169.6	2.3	B0/220		
BH	(60°-80°)	43.8	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°	2059.7	2059.7	2059.7	2059.7	2059.7	2059.7	2059.7	2059.7	2059.7	2059.7	2059.7
2.5°	2437.1	2411.2	2403.4	2398.2	2374.5	2344.7	2304.1	2285.1	2246.2	2183.6	2106.8
5°	2660.3	2655.6	2638.3	2628.8	2603.3	2561.0	2496.2	2465.2	2403.4	2298.0	2160.3
7.5°	2562.7	2592.5	2616.3	2656.0	2706.1	2704.4	2650.0	2617.6	2548.5	2409.4	2219.9
10°	2185.8	2210.0	2248.8	2339.1	2523.0	2685.4	2749.3	2726.0	2670.7	2511.8	2277.3
12.5°	2111.9	2109.3	2116.3	2142.6	2238.9	2470.3	2732.4	2779.5	2768.3	2605.5	2331.7
15°	2151.2	2148.2	2147.3	2156.4	2179.7	2277.3	2605.9	2741.1	2827.9	2692.3	2377.9
17.5°	2261.3	2248.4	2241.5	2234.1	2227.2	2251.4	2453.9	2633.6	2836.9	2768.3	2416.4
20°	2450.0	2428.4	2403.0	2361.5	2322.7	2310.6	2390.0	2523.0	2804.5	2826.1	2441.4
22.5°	2687.1	2659.5	2615.4	2539.9	2460.8	2415.1	2421.5	2488.0	2756.2	2889.2	2453.1
25°	2953.5	2918.1	2859.4	2754.5	2638.3	2557.1	2514.8	2538.1	2734.2	2963.0	2466.4
27.5°	3238.9	3199.6	3122.8	2979.9	2848.2	2738.5	2652.1	2649.1	2771.7	3059.7	2488.0
30°	3521.8	3515.7	3415.5	3264.4	3090.0	2956.5	2832.2	2816.2	2876.7	3193.6	2530.8
32.5°	3899.2	3853.8	3731.2	3575.7	3374.5	3214.3	3067.1	3029.9	3037.7	3349.5	2596.9
35°	4375.0	4325.4	4152.6	3938.0	3713.1	3523.9	3361.1	3310.6	3291.6	3604.7	2708.3
37.5°	4682.5	4681.6	4573.2	4354.7	4113.3	3904.8	3727.7	3668.6	3630.2	3913.0	2881.0
40°	4690.7	4710.9	4725.2	4723.0	4551.2	4359.0	4201.9	4128.9	4039.5	4324.9	3104.2
42.5°	4438.9	4491.2	4616.8	4830.1	4932.0	4855.6	4723.0	4651.4	4518.4	4765.8	3376.3
45°	4098.7	4134.9	4354.7	4747.7	5138.4	5347.9	5246.8	5118.6	4943.3	5225.7	3620.2
47.5°	3946.2	3952.7	4094.8	4526.1	5154.0	5751.2	5812.5	5603.9	5329.3	5596.1	3811.1
50°	3490.7	3502.3	3698.4	4142.3	4971.8	5941.6	6380.7	6183.0	5750.3	5881.6	3880.6
52.5°	2631.0	2647.4	2896.1	3511.4	4470.9	5860.4	6787.5	6739.6	6211.5	6021.0	3884.5
55°	1552.3	1573.9	1811.4	2363.7	3516.6	5344.0	6817.7	6993.9	6575.5	6103.5	3878.4
57.5°	725.0	740.1	876.1	1217.7	2187.1	4223.4	6362.6	6819.4	6776.3	6147.1	3921.2
60°	385.2	389.5	422.3	527.2	988.4	2678.0	5474.4	6157.9	6593.2	6207.6	3973.4
62.5°	294.5	295.8	294.1	306.6	415.4	1188.7	4137.9	5062.4	5856.1	6162.2	3915.6
65°	255.2	257.4	245.3	242.2	266.4	424.0	2458.2	3608.6	4601.7	5550.4	3521.3
67.5°	228.9	229.7	215.0	202.5	206.8	229.3	969.8	1975.5	3045.9	4068.4	2552.4
70°	210.7	209.9	193.9	174.0	168.4	156.7	308.3	724.1	1455.6	2063.1	1187.0
72.5°	186.5	187.0	179.2	153.3	139.9	109.7	142.9	211.2	434.4	562.2	278.1
75°	165.4	163.2	153.7	137.3	115.3	72.1	70.8	94.1	133.9	133.0	60.0
77.5°	119.6	117.4	120.5	112.7	88.5	46.6	35.4	45.3	54.4	52.7	16.8
80°	87.7	86.4	77.7	93.7	78.2	32.0	22.0	24.2	28.1	23.7	5.2
82.5°	60.0	59.6	54.8	51.8	44.5	19.4	13.8	15.1	18.1	13.4	2.6
85°	9.5	10.8	39.7	31.5	26.3	8.6	9.5	10.4	12.1	7.3	0.9
87.5°	0.0	0.0	18.6	16.4	5.2	3.5	5.6	6.0	6.0	3.9	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°	2059.7	2059.7	2059.7	2059.7	2059.7	2059.7	2059.7	2059.7	2059.7	2059.7	2059.7
2.5°	2067.5	2024.3	1944.4	1861.9	1785.5	1694.4	1631.8	1584.7	1530.3	1515.6	1547.6
5°	2081.7	2000.1	1828.2	1641.3	1465.5	1270.8	1121.8	1003.9	897.3	861.0	893.8
7.5°	2104.2	1982.8	1702.6	1394.7	1089.0	785.0	576.9	440.0	352.8	326.9	340.7
10°	2126.6	1957.8	1557.1	1102.8	684.8	382.1	248.7	198.6	180.1	176.2	178.3
12.5°	2145.2	1924.1	1379.6	784.2	366.2	204.7	162.8	154.6	152.0	152.0	152.9
15°	2156.4	1873.2	1169.3	498.7	210.7	154.6	142.1	139.5	139.5	139.9	140.8
17.5°	2155.1	1808.4	939.2	301.8	157.6	136.9	129.5	127.4	126.9	127.8	128.2
20°	2139.1	1723.7	708.2	199.1	137.3	124.8	117.4	113.6	113.1	114.0	114.9
22.5°	2108.9	1619.3	506.5	153.3	123.9	113.1	104.1	100.6	100.6	101.5	102.3
25°	2072.2	1491.4	346.3	130.0	111.8	100.6	92.0	89.0	89.8	92.0	92.4
27.5°	2026.4	1347.7	235.3	111.4	97.2	88.1	81.6	79.5	81.6	84.6	85.5
30°	1987.1	1197.8	168.0	96.3	82.5	76.0	72.1	72.1	75.1	80.7	82.0
32.5°	1956.9	1052.7	129.5	85.1	71.7	66.1	63.9	66.1	70.8	76.4	77.7
35°	1953.0	933.1	109.7	76.0	63.9	58.3	57.4	61.3	66.1	70.4	71.2
37.5°	1982.8	822.6	98.9	68.7	57.0	51.8	51.0	55.7	60.5	65.6	66.9
40°	2039.4	735.8	91.1	61.7	51.4	45.8	44.0	47.5	54.0	60.9	62.6
42.5°	2112.8	664.1	82.5	54.8	45.8	38.0	35.8	39.7	46.6	54.0	56.1
45°	2182.8	602.4	73.0	47.1	38.4	29.4	28.5	33.7	37.1	44.5	46.2
47.5°	2221.2	548.0	64.8	38.4	29.8	23.7	23.7	25.0	28.5	37.1	38.9
50°	2208.2	504.3	56.1	28.5	20.7	18.1	18.1	17.7	22.9	29.8	31.1
52.5°	2182.3	479.3	48.4	22.0	14.2	13.0	11.7	13.0	16.0	19.0	19.4
55°	2178.4	475.0	40.6	17.7	9.9	8.6	6.5	6.5	6.5	6.0	5.2
57.5°	2208.7	481.9	34.1	14.2	7.3	5.6	3.5	0.0	0.0	0.0	0.0
60°	2239.8	489.2	29.4	9.9	5.2	3.0	0.4	0.0	0.0	0.0	0.0
62.5°	2187.9	472.8	24.6	6.0	3.9	1.3	0.0	0.0	0.0	0.0	0.0
65°	1921.9	402.4	19.4	4.3	2.6	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	1367.1	269.4	13.0	2.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0
70°	624.0	112.7	8.2	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	133.4	35.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	27.2	25.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	8.6	40.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	5.2	28.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.9	4.3	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)