

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: P300603

Luminaire Tested: **GLNA-AF-01-LED-E1-AFL-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300603
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-01-LED-E1-AFL-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4634.9 lumens
Efficiency: N/A
Efficacy: 78.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G0

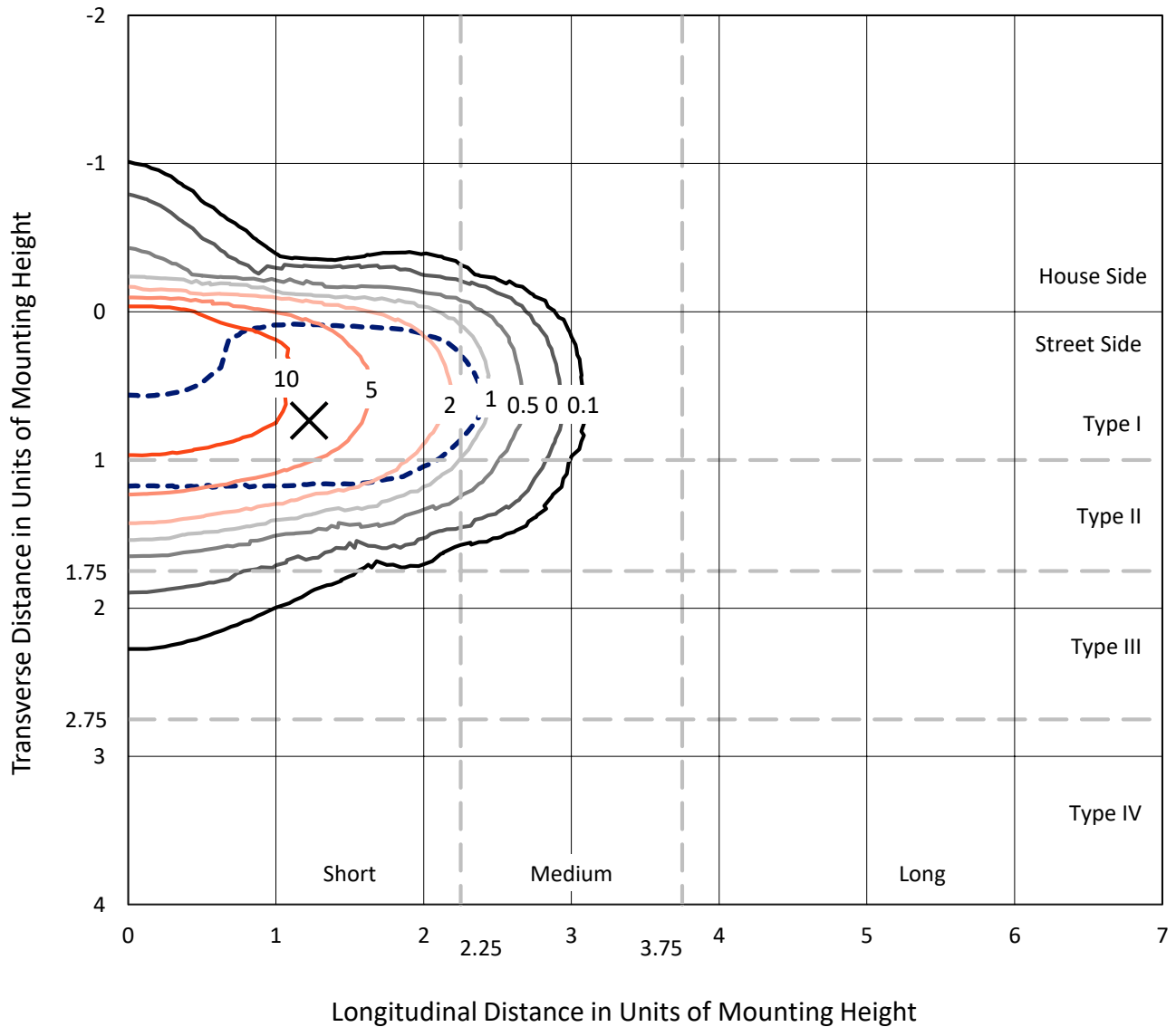
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

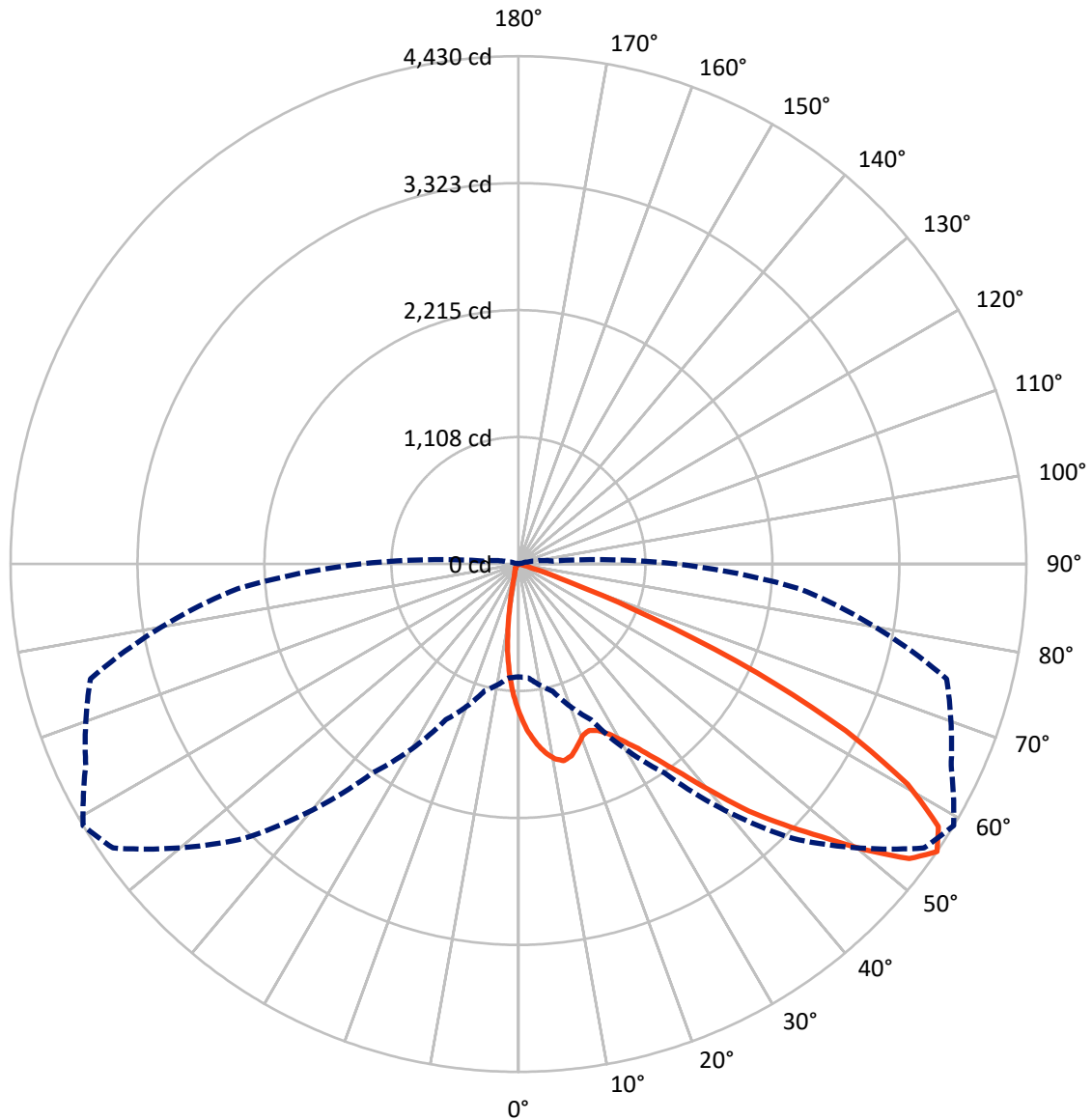
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.2 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	258.9	0.0	258.9
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	4376.1	0.0	4376.1
	% Fixture	94.4	0.0	94.4
Total	Lumens	4634.9	0.0	4634.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.3	2.4
10°-20°	261.7	5.6
20°-30°	445.2	9.6
30°-40°	765.7	16.5
40°-50°	1182.2	25.5
50°-60°	1188.5	25.6
60°-70°	609.5	13.1
70°-80°	66.0	1.4
80°-90°	6.9	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°	4634.9	100.0
0°-180°	4634.9	100.0

Coefficient of Utilization



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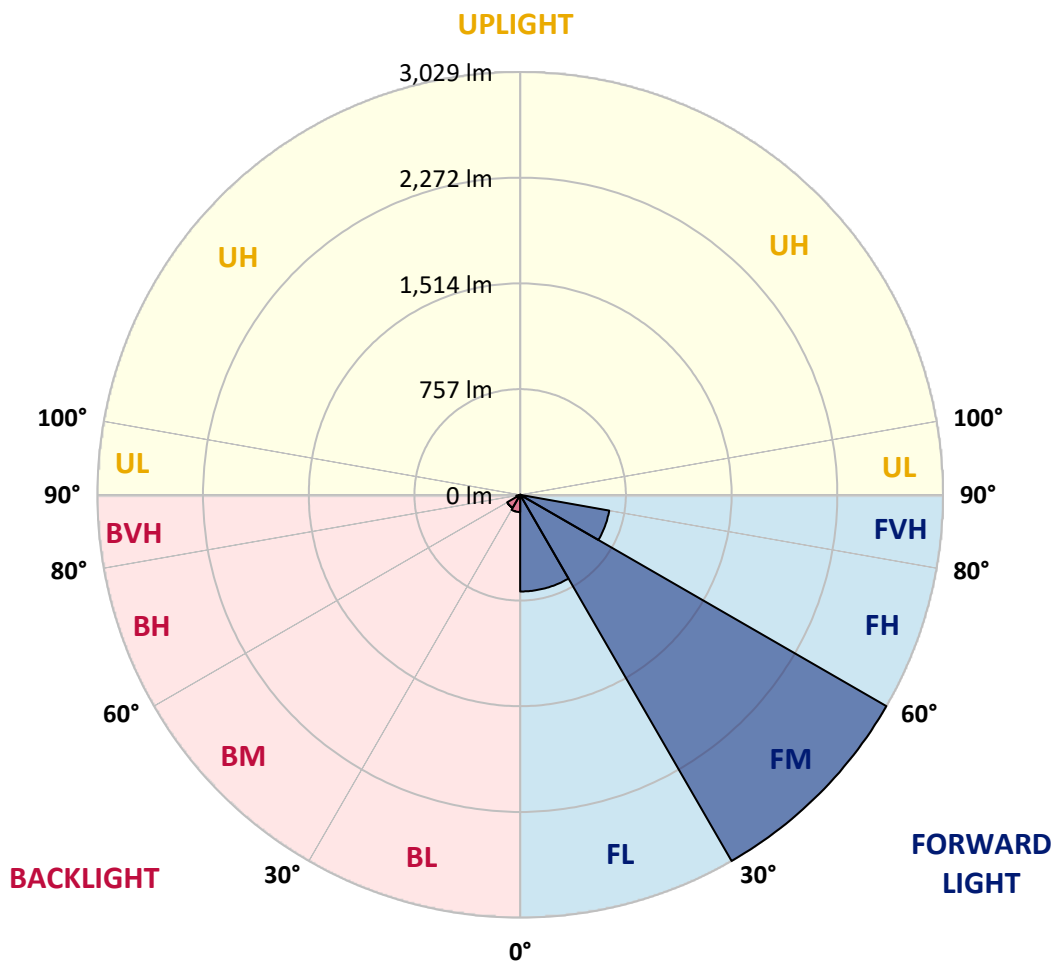
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	692.6	14.9			
FM (30°-60°)	3028.9	65.3			
FH (60°-80°)	647.8	14.0			G0/660
FVH (80°-90°)	6.8	0.1			G0/10
BL (0°-30°)	123.6	2.7	B1/500		
BM (30°-60°)	107.4	2.3	B0/220		
BH (60°-80°)	27.7	0.6	B0/110		G0/110
BVH (80°-90°)	0.1	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-G0

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1304.7	1304.7	1304.7	1304.7	1304.7	1304.7	1304.7	1304.7	1304.7	1304.7	1304.7
2.5°	1543.8	1527.4	1522.4	1519.2	1504.1	1485.2	1459.5	1447.5	1422.9	1383.2	1334.5
5°	1685.2	1682.2	1671.2	1665.2	1649.1	1622.3	1581.3	1561.6	1522.4	1455.7	1368.5
7.5°	1623.4	1642.3	1657.3	1682.5	1714.2	1713.1	1678.6	1658.1	1614.4	1526.3	1406.2
10°	1384.6	1399.9	1424.5	1481.7	1598.2	1701.1	1741.5	1726.8	1691.8	1591.1	1442.6
12.5°	1337.8	1336.2	1340.6	1357.2	1418.2	1564.8	1730.9	1760.7	1753.6	1650.5	1477.0
15°	1362.7	1360.8	1360.2	1366.0	1380.8	1442.6	1650.7	1736.3	1791.3	1705.4	1506.3
17.5°	1432.5	1424.3	1419.9	1415.2	1410.9	1426.2	1554.5	1668.2	1797.1	1753.6	1530.7
20°	1552.0	1538.3	1522.2	1495.9	1471.3	1463.6	1514.0	1598.2	1776.6	1790.2	1546.5
22.5°	1702.2	1684.7	1656.8	1608.9	1558.8	1529.8	1533.9	1576.1	1745.9	1830.2	1553.9
25°	1870.9	1848.5	1811.3	1744.8	1671.2	1619.8	1593.0	1607.8	1732.0	1876.9	1562.4
27.5°	2051.7	2026.8	1978.1	1887.6	1804.2	1734.7	1680.0	1678.1	1755.8	1938.2	1576.1
30°	2230.9	2227.1	2163.6	2067.9	1957.4	1872.8	1794.1	1783.9	1822.2	2023.0	1603.1
32.5°	2469.9	2441.2	2363.5	2265.1	2137.6	2036.1	1942.9	1919.3	1924.3	2121.7	1645.0
35°	2771.4	2739.9	2630.5	2494.6	2352.1	2232.3	2129.1	2097.1	2085.1	2283.4	1715.6
37.5°	2966.1	2965.6	2896.9	2758.5	2605.6	2473.5	2361.4	2323.9	2299.5	2478.7	1825.0
40°	2971.3	2984.2	2993.2	2991.8	2883.0	2761.3	2661.7	2615.5	2558.8	2739.6	1966.4
42.5°	2811.9	2845.0	2924.5	3059.7	3124.2	3075.8	2991.8	2946.4	2862.2	3018.9	2138.7
45°	2596.3	2619.3	2758.5	3007.4	3255.0	3387.6	3323.6	3242.4	3131.3	3310.2	2293.2
47.5°	2499.8	2503.9	2593.9	2867.1	3264.8	3643.1	3681.9	3549.8	3375.9	3544.9	2414.1
50°	2211.2	2218.6	2342.8	2623.9	3149.4	3763.7	4041.9	3916.6	3642.6	3725.7	2458.2
52.5°	1666.6	1677.0	1834.5	2224.3	2832.1	3712.3	4299.6	4269.2	3934.7	3814.1	2460.6
55°	983.3	997.0	1147.4	1497.3	2227.6	3385.2	4318.7	4430.3	4165.3	3866.3	2456.8
57.5°	459.3	468.8	555.0	771.3	1385.4	2675.4	4030.4	4319.8	4292.5	3893.9	2483.9
60°	244.0	246.7	267.5	334.0	626.1	1696.4	3467.8	3900.8	4176.5	3932.2	2517.0
62.5°	186.5	187.4	186.3	194.2	263.1	753.0	2621.2	3206.8	3709.6	3903.5	2480.3
65°	161.7	163.0	155.4	153.4	168.8	268.6	1557.2	2285.9	2915.0	3515.9	2230.6
67.5°	145.0	145.5	136.2	128.3	131.0	145.2	614.3	1251.4	1929.5	2577.2	1616.8
70°	133.5	132.9	122.8	110.2	106.7	99.3	195.3	458.7	922.1	1306.9	751.9
72.5°	118.2	118.4	113.5	97.1	88.6	69.5	90.5	133.8	275.2	356.1	176.2
75°	104.8	103.4	97.4	87.0	73.0	45.7	44.9	59.6	84.8	84.2	38.0
77.5°	75.8	74.4	76.3	71.4	56.1	29.5	22.4	28.7	34.5	33.4	10.7
80°	55.5	54.7	49.2	59.4	49.5	20.2	13.9	15.3	17.8	15.0	3.3
82.5°	38.0	37.7	34.7	32.8	28.2	12.3	8.8	9.6	11.5	8.5	1.6
85°	6.0	6.8	25.2	20.0	16.7	5.5	6.0	6.6	7.7	4.6	0.5
87.5°	0.0	0.0	11.8	10.4	3.3	2.2	3.6	3.8	3.8	2.5	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°	1304.7	1304.7	1304.7	1304.7	1304.7	1304.7	1304.7	1304.7	1304.7	1304.7	1304.7
2.5°	1309.6	1282.3	1231.7	1179.4	1131.0	1073.3	1033.7	1003.8	969.4	960.1	980.3
5°	1318.7	1267.0	1158.1	1039.7	928.3	805.0	710.6	635.9	568.4	545.4	566.2
7.5°	1332.9	1256.0	1078.5	883.5	689.8	497.3	365.4	278.7	223.5	207.1	215.8
10°	1347.1	1240.2	986.3	698.6	433.8	242.1	157.6	125.8	114.1	111.6	113.0
12.5°	1358.9	1218.8	873.9	496.7	232.0	129.7	103.1	97.9	96.3	96.3	96.8
15°	1366.0	1186.6	740.7	315.9	133.5	97.9	90.0	88.3	88.3	88.6	89.2
17.5°	1365.2	1145.5	594.9	191.2	99.8	86.7	82.1	80.7	80.4	81.0	81.2
20°	1355.1	1091.9	448.6	126.1	87.0	79.0	74.4	71.9	71.7	72.2	72.8
22.5°	1335.9	1025.7	320.8	97.1	78.5	71.7	65.9	63.7	63.7	64.3	64.8
25°	1312.7	944.8	219.4	82.3	70.8	63.7	58.3	56.3	56.9	58.3	58.5
27.5°	1283.7	853.7	149.1	70.6	61.5	55.8	51.7	50.3	51.7	53.6	54.2
30°	1258.8	758.8	106.4	61.0	52.2	48.1	45.7	45.7	47.6	51.1	52.0
32.5°	1239.6	666.9	82.1	53.9	45.4	41.8	40.5	41.8	44.9	48.4	49.2
35°	1237.2	591.1	69.5	48.1	40.5	36.9	36.4	38.8	41.8	44.6	45.1
37.5°	1256.0	521.1	62.6	43.5	36.1	32.8	32.3	35.3	38.3	41.6	42.4
40°	1291.9	466.1	57.7	39.1	32.5	29.0	27.9	30.1	34.2	38.6	39.7
42.5°	1338.4	420.7	52.2	34.7	29.0	24.1	22.7	25.2	29.5	34.2	35.6
45°	1382.7	381.6	46.2	29.8	24.3	18.6	18.1	21.3	23.5	28.2	29.3
47.5°	1407.0	347.1	41.0	24.3	18.9	15.0	15.0	15.9	18.1	23.5	24.6
50°	1398.8	319.5	35.6	18.1	13.1	11.5	11.5	11.2	14.5	18.9	19.7
52.5°	1382.4	303.6	30.6	13.9	9.0	8.2	7.4	8.2	10.1	12.0	12.3
55°	1379.9	300.9	25.7	11.2	6.3	5.5	4.1	4.1	4.1	3.8	3.3
57.5°	1399.1	305.3	21.6	9.0	4.6	3.6	2.2	0.0	0.0	0.0	0.0
60°	1418.8	309.9	18.6	6.3	3.3	1.9	0.3	0.0	0.0	0.0	0.0
62.5°	1386.0	299.5	15.6	3.8	2.5	0.8	0.0	0.0	0.0	0.0	0.0
65°	1217.5	254.9	12.3	2.7	1.6	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	866.0	170.7	8.2	1.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0
70°	395.2	71.4	5.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	84.5	22.2	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	17.2	16.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	5.5	25.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	3.3	18.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.5	2.7	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)