

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: P300600

Luminaire Tested: **GLNA-AF-01-LED-E1-AFL-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300600
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-7027-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K 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: 4027 lumens
Efficiency: N/A
Efficacy: 68.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B0 - U0 - G0

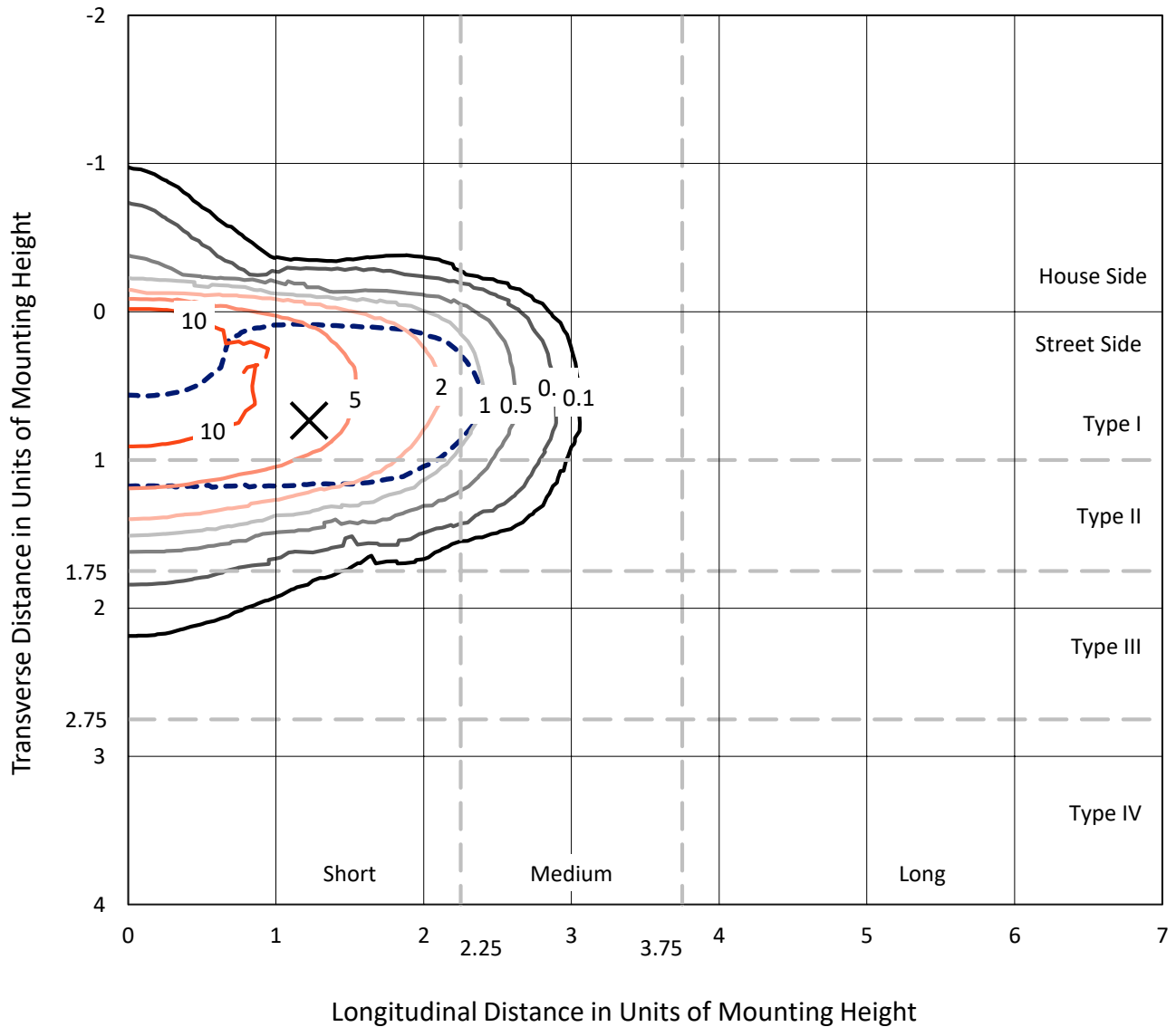
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

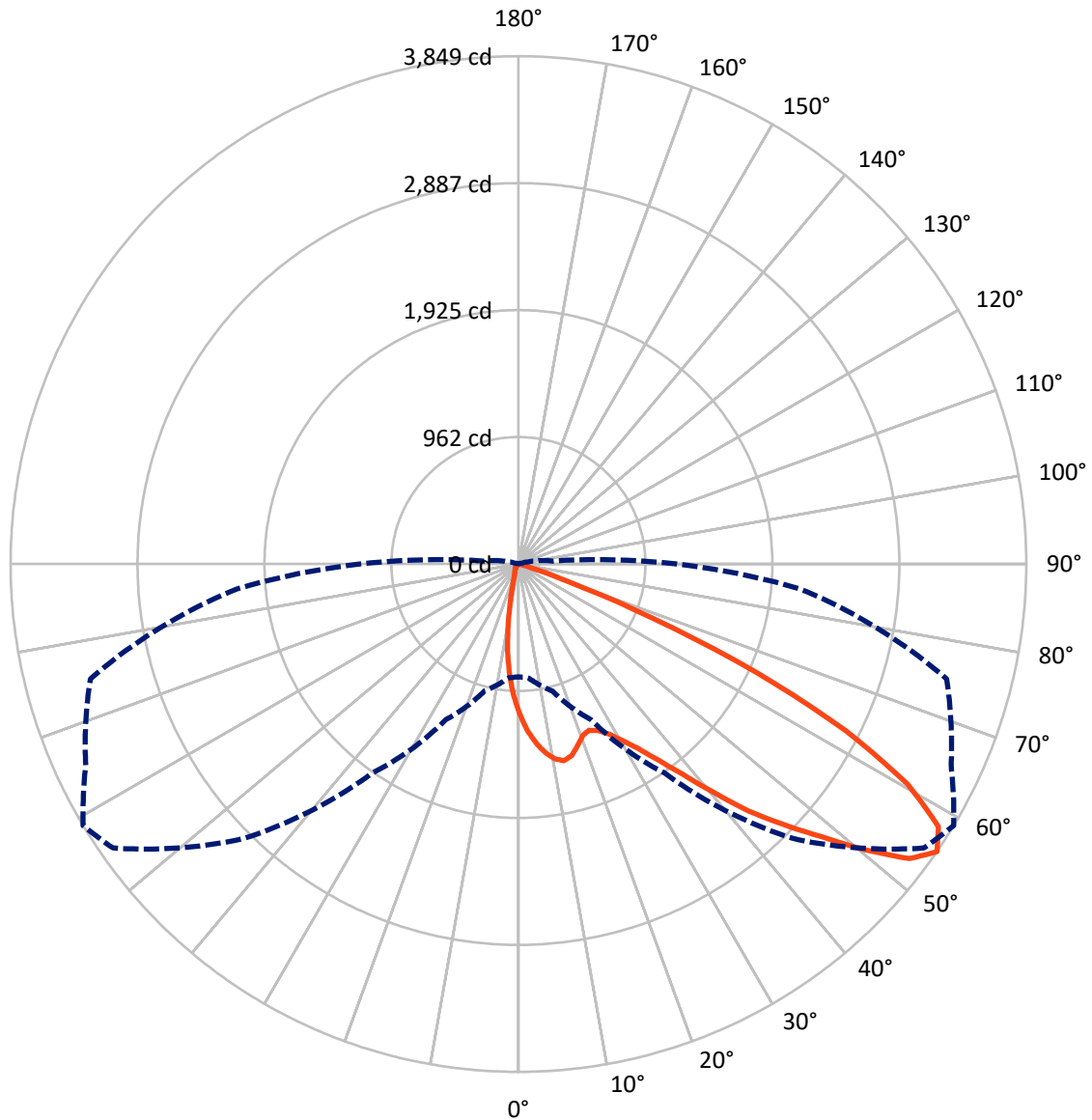
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.1 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	224.9	0.0	224.9
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	3802.1	0.0	3802.1
	% Fixture	94.4	0.0	94.4
Total	Lumens	4027.0	0.0	4027.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	2.4
10°-20°	227.3	5.6
20°-30°	386.8	9.6
30°-40°	665.3	16.5
40°-50°	1027.1	25.5
50°-60°	1032.6	25.6
60°-70°	529.5	13.1
70°-80°	57.4	1.4
80°-90°	6.0	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°	4027.0	100.0
0°-180°	4027.0	100.0



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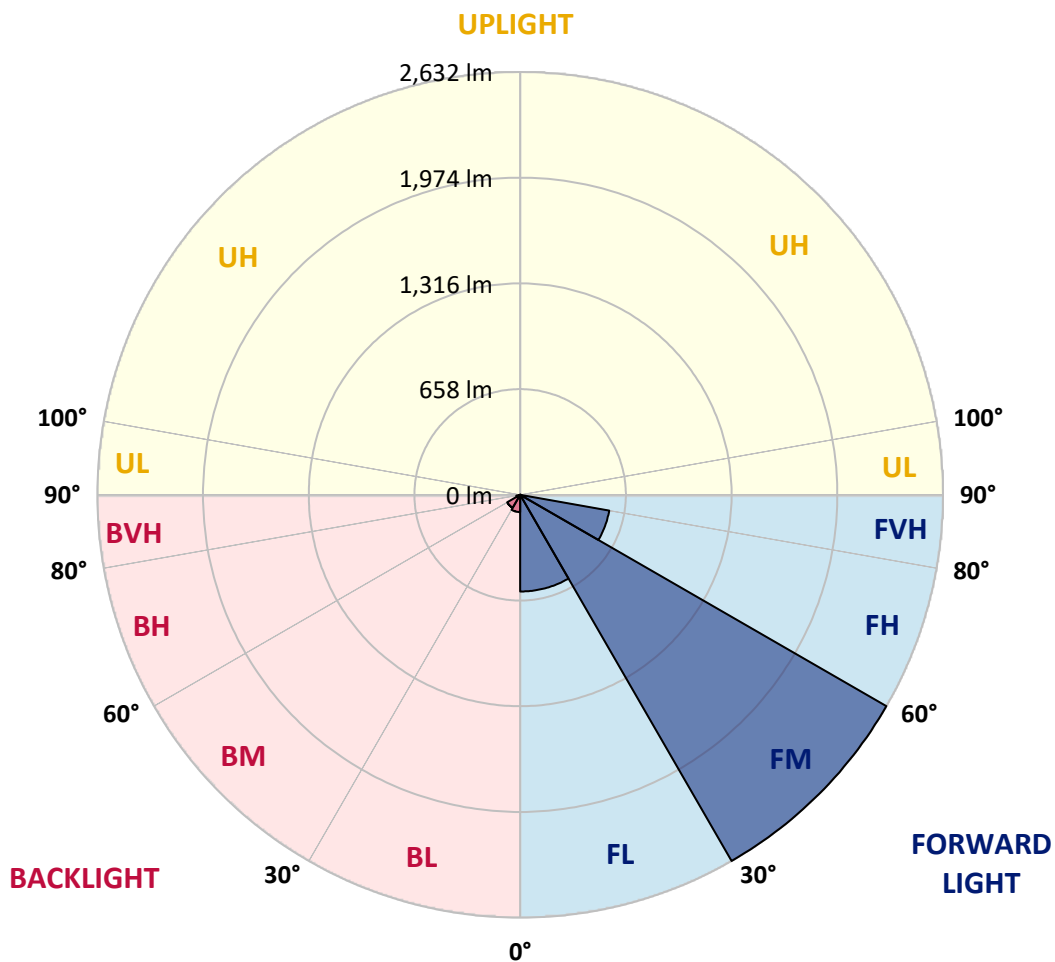
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	601.8	14.9			
FM	(30°-60°)	2631.6	65.3			
FH	(60°-80°)	562.8	14.0			G0/660
FVH	(80°-90°)	5.9	0.1			G0/10
BL	(0°-30°)	107.4	2.7	B0/110		
BM	(30°-60°)	93.4	2.3	B0/220		
BH	(60°-80°)	24.1	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: B0-U0-G0

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1133.6	1133.6	1133.6	1133.6	1133.6	1133.6	1133.6	1133.6	1133.6	1133.6	1133.6
2.5°	1341.3	1327.0	1322.8	1319.9	1306.8	1290.4	1268.1	1257.6	1236.3	1201.8	1159.5
5°	1464.2	1461.6	1452.0	1446.8	1432.8	1409.5	1373.9	1356.7	1322.8	1264.8	1189.0
7.5°	1410.5	1426.9	1439.9	1461.8	1489.4	1488.4	1458.5	1440.6	1402.6	1326.1	1221.8
10°	1203.0	1216.3	1237.7	1287.4	1388.6	1477.9	1513.1	1500.3	1469.9	1382.4	1253.4
12.5°	1162.3	1160.9	1164.7	1179.2	1232.2	1359.6	1503.9	1529.8	1523.6	1434.0	1283.3
15°	1184.0	1182.3	1181.8	1186.8	1199.7	1253.4	1434.2	1508.6	1556.4	1481.8	1308.7
17.5°	1244.6	1237.4	1233.6	1229.6	1225.8	1239.1	1350.6	1449.4	1561.4	1523.6	1329.9
20°	1348.4	1336.5	1322.5	1299.7	1278.3	1271.7	1315.4	1388.6	1543.5	1555.4	1343.7
22.5°	1478.9	1463.7	1439.4	1397.9	1354.4	1329.2	1332.7	1369.3	1516.9	1590.1	1350.1
25°	1625.5	1606.0	1573.7	1516.0	1452.0	1407.4	1384.1	1396.9	1504.8	1630.8	1357.5
27.5°	1782.6	1761.0	1718.7	1640.0	1567.5	1507.2	1459.6	1458.0	1525.5	1684.0	1369.3
30°	1938.3	1935.0	1879.8	1796.6	1700.6	1627.2	1558.7	1550.0	1583.2	1757.7	1392.9
32.5°	2146.0	2121.0	2053.5	1968.0	1857.2	1769.1	1688.0	1667.6	1671.9	1843.5	1429.2
35°	2407.9	2380.5	2285.5	2167.4	2043.6	1939.5	1849.9	1822.1	1811.6	1983.9	1490.5
37.5°	2577.1	2576.6	2517.0	2396.7	2263.9	2149.1	2051.6	2019.1	1997.9	2153.6	1585.6
40°	2581.6	2592.8	2600.6	2599.4	2504.8	2399.1	2312.6	2272.4	2223.2	2380.3	1708.5
42.5°	2443.0	2471.8	2541.0	2658.4	2714.4	2672.4	2599.4	2560.0	2486.8	2622.9	1858.2
45°	2255.8	2275.7	2396.7	2613.0	2828.0	2943.3	2887.7	2817.1	2720.6	2876.0	1992.5
47.5°	2171.9	2175.5	2253.6	2491.1	2836.6	3165.3	3199.0	3084.2	2933.1	3080.0	2097.5
50°	1921.2	1927.6	2035.5	2279.8	2736.3	3270.1	3511.8	3402.9	3164.8	3237.0	2135.8
52.5°	1448.0	1457.0	1593.9	1932.6	2460.6	3225.4	3735.6	3709.2	3418.6	3313.8	2137.9
55°	854.4	866.2	996.9	1300.9	1935.4	2941.2	3752.3	3849.2	3618.9	3359.2	2134.6
57.5°	399.0	407.3	482.2	670.2	1203.7	2324.5	3501.8	3753.2	3729.4	3383.2	2158.1
60°	212.0	214.4	232.4	290.2	544.0	1473.9	3012.9	3389.1	3628.7	3416.5	2186.9
62.5°	162.1	162.8	161.8	168.7	228.6	654.3	2277.4	2786.2	3223.0	3391.5	2155.0
65°	140.5	141.6	135.0	133.3	146.6	233.4	1352.9	1986.0	2532.6	3054.8	1938.0
67.5°	126.0	126.4	118.3	111.5	113.8	126.2	533.8	1087.3	1676.4	2239.1	1404.8
70°	116.0	115.5	106.7	95.8	92.7	86.3	169.7	398.5	801.1	1135.5	653.3
72.5°	102.7	102.9	98.6	84.4	77.0	60.4	78.7	116.2	239.1	309.4	153.0
75°	91.0	89.8	84.6	75.6	63.5	39.7	39.0	51.8	73.7	73.2	33.0
77.5°	65.8	64.6	66.3	62.0	48.7	25.7	19.5	25.0	29.9	29.0	9.3
80°	48.2	47.5	42.8	51.6	43.0	17.6	12.1	13.3	15.4	13.1	2.9
82.5°	33.0	32.8	30.2	28.5	24.5	10.7	7.6	8.3	10.0	7.4	1.4
85°	5.2	5.9	21.9	17.3	14.5	4.8	5.2	5.7	6.7	4.0	0.5
87.5°	0.0	0.0	10.2	9.0	2.9	1.9	3.1	3.3	3.3	2.1	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°	1133.6	1133.6	1133.6	1133.6	1133.6	1133.6	1133.6	1133.6	1133.6	1133.6	1133.6
2.5°	1137.9	1114.1	1070.1	1024.7	982.7	932.5	898.1	872.2	842.2	834.2	851.7
5°	1145.7	1100.8	1006.2	903.3	806.6	699.4	617.4	552.5	493.8	473.9	491.9
7.5°	1158.1	1091.3	937.1	767.6	599.4	432.0	317.5	242.2	194.2	179.9	187.5
10°	1170.4	1077.5	857.0	607.0	376.9	210.3	136.9	109.3	99.1	97.0	98.1
12.5°	1180.6	1059.0	759.3	431.6	201.5	112.6	89.6	85.1	83.7	83.7	84.1
15°	1186.8	1030.9	643.6	274.5	116.0	85.1	78.2	76.8	76.8	77.0	77.5
17.5°	1186.1	995.3	516.9	166.1	86.7	75.3	71.3	70.1	69.9	70.3	70.6
20°	1177.3	948.7	389.7	109.6	75.6	68.7	64.6	62.5	62.3	62.7	63.2
22.5°	1160.7	891.2	278.8	84.4	68.2	62.3	57.3	55.4	55.4	55.8	56.3
25°	1140.5	820.8	190.6	71.5	61.6	55.4	50.6	49.0	49.4	50.6	50.9
27.5°	1115.3	741.7	129.5	61.3	53.5	48.5	44.9	43.7	44.9	46.6	47.1
30°	1093.7	659.2	92.4	53.0	45.4	41.8	39.7	39.7	41.4	44.4	45.2
32.5°	1077.0	579.4	71.3	46.8	39.4	36.4	35.2	36.4	39.0	42.1	42.8
35°	1074.9	513.6	60.4	41.8	35.2	32.1	31.6	33.7	36.4	38.7	39.2
37.5°	1091.3	452.7	54.4	37.8	31.4	28.5	28.0	30.7	33.3	36.1	36.8
40°	1122.4	405.0	50.1	34.0	28.3	25.2	24.2	26.1	29.7	33.5	34.5
42.5°	1162.8	365.5	45.4	30.2	25.2	20.9	19.7	21.9	25.7	29.7	30.9
45°	1201.3	331.5	40.2	25.9	21.2	16.2	15.7	18.5	20.4	24.5	25.4
47.5°	1222.5	301.6	35.6	21.2	16.4	13.1	13.1	13.8	15.7	20.4	21.4
50°	1215.3	277.6	30.9	15.7	11.4	10.0	10.0	9.7	12.6	16.4	17.1
52.5°	1201.1	263.8	26.6	12.1	7.8	7.1	6.4	7.1	8.8	10.5	10.7
55°	1198.9	261.4	22.3	9.7	5.5	4.8	3.6	3.6	3.6	3.3	2.9
57.5°	1215.6	265.2	18.8	7.8	4.0	3.1	1.9	0.0	0.0	0.0	0.0
60°	1232.7	269.3	16.2	5.5	2.9	1.7	0.2	0.0	0.0	0.0	0.0
62.5°	1204.2	260.2	13.5	3.3	2.1	0.7	0.0	0.0	0.0	0.0	0.0
65°	1057.8	221.5	10.7	2.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	752.4	148.3	7.1	1.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0
70°	343.4	62.0	4.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	73.4	19.2	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	15.0	14.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	4.8	22.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	2.9	15.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.5	2.4	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)