

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: P191231

Luminaire Tested: **GLEON-AF-03-LED-E1-SL4-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191231
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24294)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-03-LED-E1-SL4-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11638.1 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G3

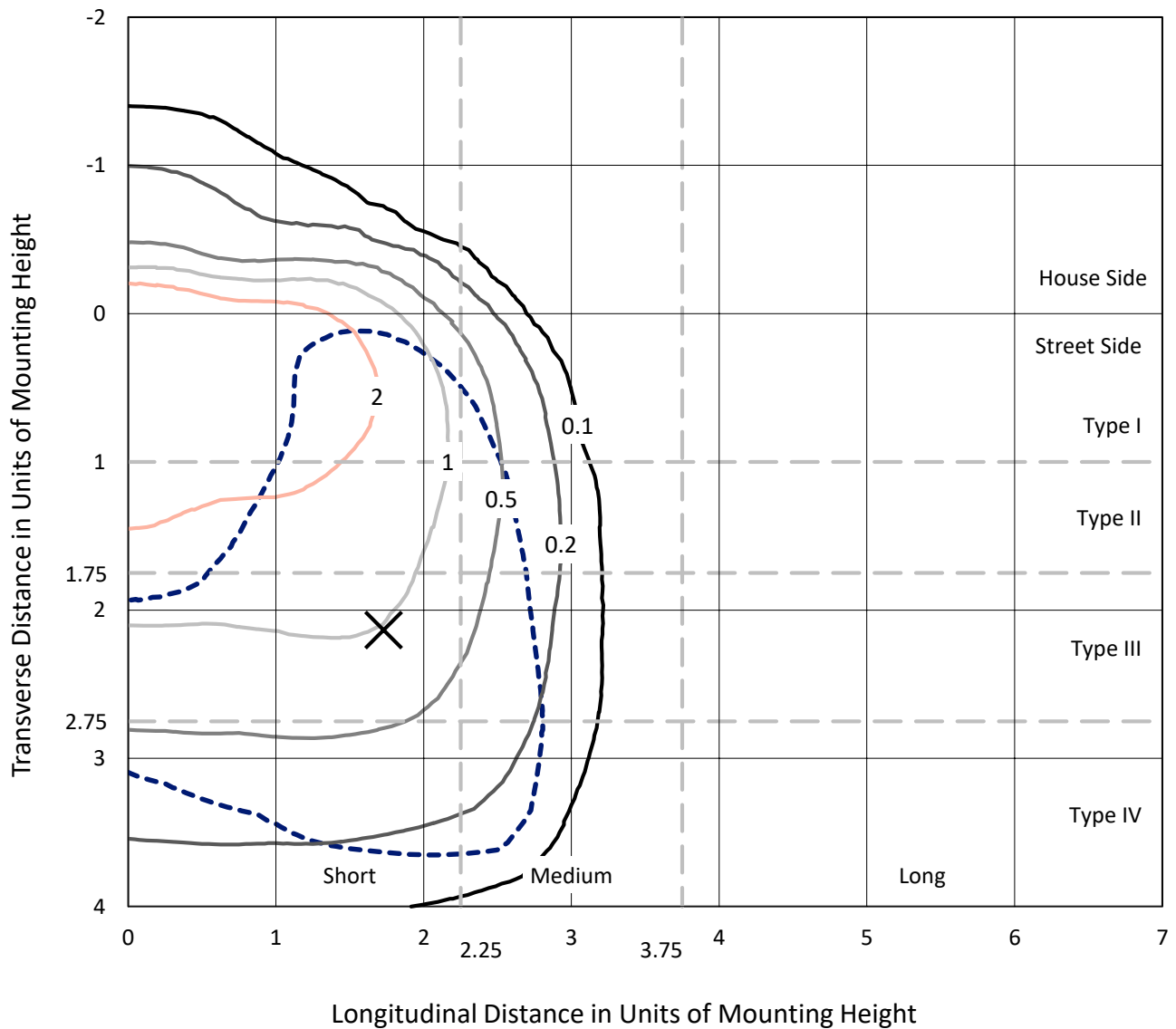
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

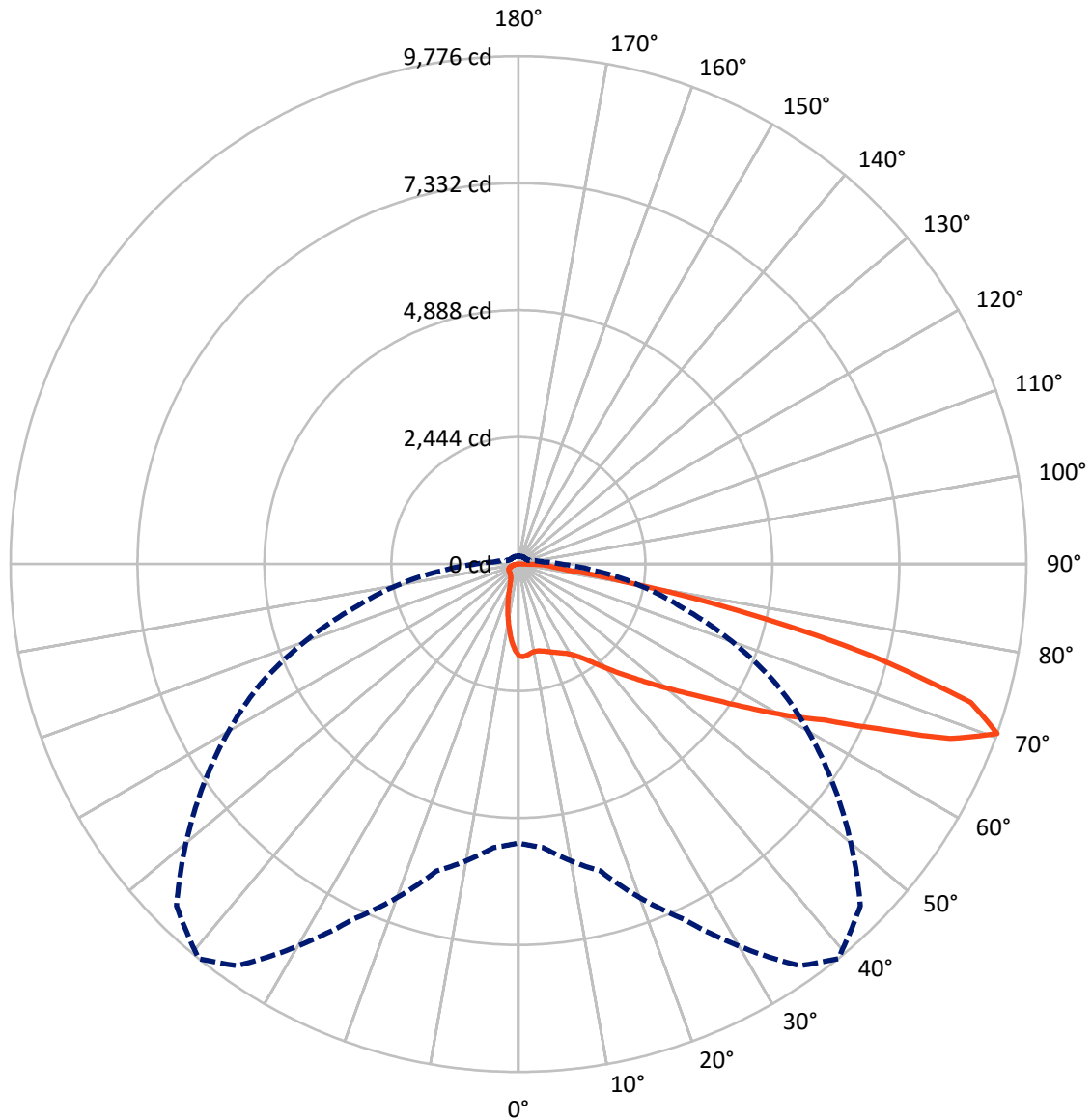
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1323.7	0.0	1323.7
	% Fixture	11.4	0.0	11.4
Street Side	Lumens	10314.5	0.0	10314.5
	% Fixture	88.6	0.0	88.6
Total	Lumens	11638.1	0.0	11638.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.6	1.3
10°-20°	379.0	3.3
20°-30°	590.1	5.1
30°-40°	919.3	7.9
40°-50°	1543.4	13.3
50°-60°	2451.8	21.1
60°-70°	3270.4	28.1
70°-80°	1974.9	17.0
80°-90°	357.4	3.1
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°	11638.1	100.0
0°-180°	11638.1	100.0



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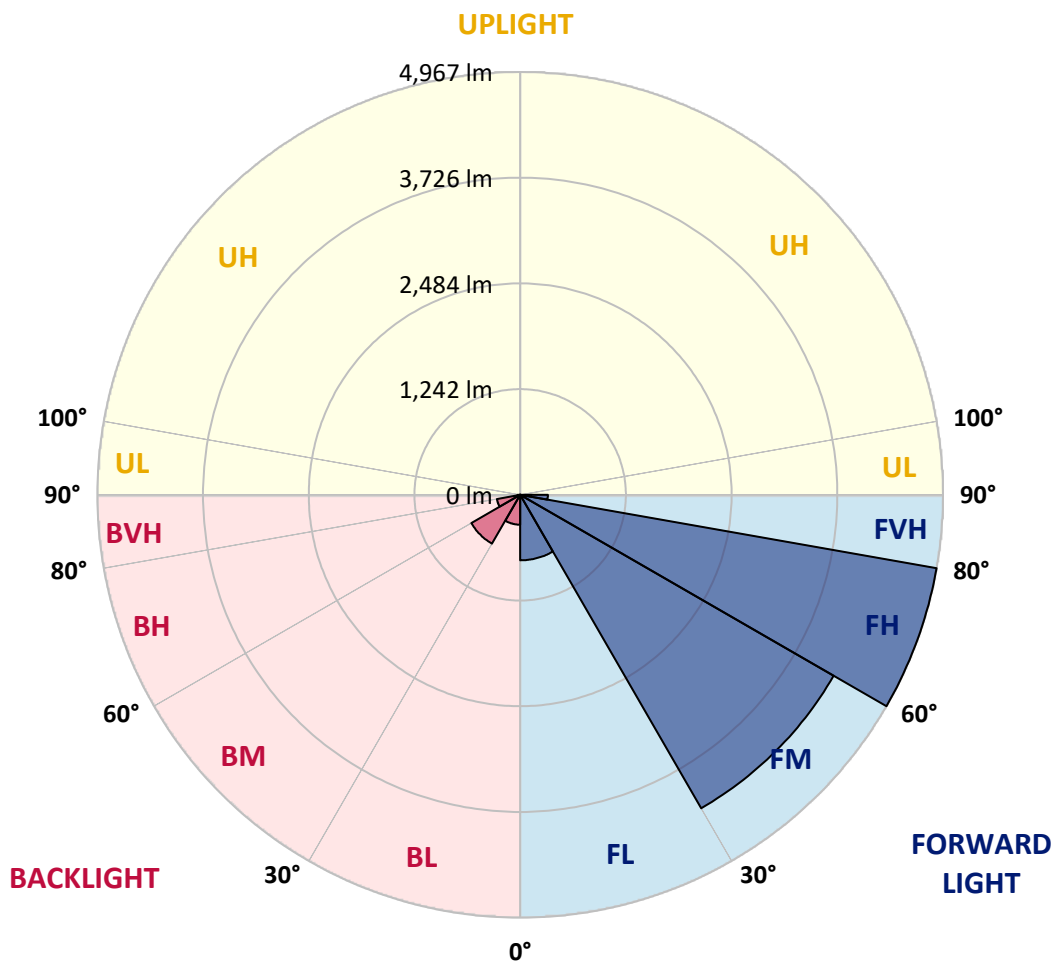
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	769.6	6.6			
FM	(30°-60°)	4252.1	36.5			
FH	(60°-80°)	4967.5	42.7			G2/5000
FVH	(80°-90°)	325.2	2.8			G3/500
BL	(0°-30°)	351.1	3.0	B1/500		
BM	(30°-60°)	662.4	5.7	B1/1000		
BH	(60°-80°)	277.9	2.4	B1/500		G1/500
BVH	(80°-90°)	32.2	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1766.8	1766.8	1766.8	1766.8	1766.8	1766.8	1766.8	1766.8	1766.8	1766.8	1766.8
2.5°	1801.2	1800.6	1795.8	1792.3	1789.3	1788.1	1790.5	1781.7	1773.9	1764.5	1754.5
5°	1787.6	1787.0	1779.3	1772.2	1765.1	1762.7	1762.1	1746.2	1736.7	1722.4	1703.5
7.5°	1772.8	1769.8	1759.8	1747.9	1735.4	1729.6	1723.7	1702.9	1692.3	1678.0	1656.2
10°	1757.3	1753.8	1744.3	1732.6	1720.7	1711.8	1701.8	1681.6	1670.4	1659.7	1634.3
12.5°	1741.4	1738.4	1736.0	1730.7	1722.4	1714.8	1707.1	1689.9	1678.0	1665.7	1636.1
15°	1739.0	1737.9	1743.2	1746.7	1742.0	1737.3	1729.0	1714.2	1701.8	1689.3	1650.8
17.5°	1757.9	1757.3	1771.0	1780.4	1778.1	1769.8	1758.6	1742.0	1732.0	1721.3	1673.3
20°	1799.4	1802.3	1818.9	1831.4	1819.5	1807.7	1789.3	1766.2	1760.9	1756.2	1696.5
22.5°	1877.5	1880.5	1892.3	1897.1	1866.3	1849.1	1823.6	1794.1	1790.5	1794.1	1724.3
25°	1999.4	1996.4	1994.7	1976.9	1920.7	1894.1	1861.6	1830.8	1832.5	1848.5	1763.3
27.5°	2160.9	2144.9	2120.1	2066.9	1977.5	1947.9	1908.3	1879.9	1891.1	1921.9	1821.9
30°	2328.3	2310.6	2253.3	2166.2	2052.0	2019.5	1975.1	1943.2	1972.8	2021.2	1900.0
32.5°	2483.4	2481.1	2397.0	2285.2	2155.1	2126.6	2082.2	2046.1	2094.1	2168.0	2017.2
35°	2652.6	2657.9	2557.4	2423.1	2294.1	2264.5	2232.5	2205.3	2269.2	2371.0	2187.0
37.5°	2833.7	2844.3	2725.4	2573.9	2452.6	2440.2	2421.3	2409.5	2508.3	2649.1	2424.2
40°	3075.7	3065.1	2900.0	2744.4	2647.3	2646.7	2640.8	2655.0	2819.5	3012.4	2728.9
42.5°	3334.9	3303.5	3085.2	2927.2	2860.9	2881.0	2892.9	2950.9	3194.1	3453.8	3100.6
45°	3614.2	3543.7	3277.4	3120.7	3098.2	3140.8	3181.1	3307.1	3634.9	3956.2	3507.7
47.5°	3837.2	3769.2	3476.3	3323.7	3372.8	3437.2	3514.8	3714.1	4128.3	4475.1	3909.4
50°	4012.9	3968.6	3676.9	3560.3	3675.2	3774.5	3901.1	4175.1	4641.9	4980.4	4281.7
52.5°	4183.4	4150.2	3879.2	3802.9	4030.1	4167.4	4339.6	4669.8	5168.6	5477.5	4594.6
55°	4337.2	4313.6	4097.0	4105.3	4447.9	4626.6	4843.2	5233.1	5742.5	5920.6	4859.7
57.5°	4510.6	4480.4	4345.5	4484.6	4984.5	5216.5	5498.2	5866.2	6281.0	6314.8	5061.5
60°	4685.1	4659.1	4621.3	4922.4	5666.2	5910.0	6176.9	6479.8	6827.2	6620.6	5049.7
62.5°	4836.6	4839.6	4906.5	5382.2	6333.7	6615.9	6941.3	7240.8	7321.3	6673.9	4676.3
65°	5093.5	5140.2	5339.6	6033.1	7273.3	7650.9	8050.2	8002.2	7457.9	6176.3	3875.7
67.5°	5398.7	5481.0	5885.1	6900.5	8460.8	8962.1	9116.4	8174.5	6910.5	5020.6	2762.7
70°	5368.0	5481.0	6120.6	7547.2	9439.6	9775.6	9307.0	7398.2	5487.5	3279.9	1467.4
72.5°	4766.8	4928.4	5640.8	7250.8	9131.3	9101.7	8079.8	5515.3	3260.3	1317.2	573.4
75°	3633.1	3796.4	4409.4	5728.3	7217.1	6968.5	5733.1	3046.8	1237.3	523.0	361.5
77.5°	2089.9	2216.5	2690.0	3513.0	4578.6	4323.6	3191.1	1355.0	602.3	364.5	282.2
80°	1166.9	1237.3	1524.8	1782.2	2243.7	2056.7	1427.8	842.0	449.7	264.5	217.8
82.5°	922.5	985.2	1233.2	1124.2	1024.8	945.5	820.1	749.7	359.2	166.8	130.2
85°	805.9	865.6	1043.8	885.2	700.0	642.0	666.2	737.9	279.3	100.6	111.2
87.5°	746.8	826.6	930.2	682.2	544.9	482.8	614.8	808.8	89.9	62.7	45.0
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°	1766.8	1766.8	1766.8	1766.8	1766.8	1766.8	1766.8	1766.8	1766.8	1766.8	1766.8
2.5°	1745.6	1736.0	1720.7	1707.1	1685.8	1674.6	1662.1	1653.2	1646.1	1640.2	1649.7
5°	1691.7	1674.0	1641.4	1606.4	1565.1	1532.5	1505.3	1479.9	1462.1	1450.2	1458.5
7.5°	1640.8	1611.9	1560.9	1497.6	1426.6	1366.3	1316.5	1272.8	1242.6	1223.0	1230.7
10°	1611.9	1575.8	1497.0	1397.7	1292.9	1198.8	1120.7	1053.2	1006.5	979.9	984.0
12.5°	1604.7	1558.0	1449.1	1312.4	1169.2	1038.5	928.4	834.9	769.3	734.9	736.1
15°	1610.0	1550.3	1404.1	1230.7	1049.6	884.6	747.4	633.7	557.4	518.3	517.7
17.5°	1618.9	1544.3	1356.7	1142.6	928.4	736.7	583.4	472.2	404.7	373.4	371.0
20°	1628.4	1534.9	1303.5	1047.3	802.4	599.4	456.8	369.8	327.2	310.1	308.8
22.5°	1642.0	1526.7	1248.5	946.7	678.7	488.2	375.7	317.1	294.7	285.8	284.6
25°	1663.9	1522.5	1189.9	842.0	567.4	408.3	327.2	291.1	278.1	272.2	271.6
27.5°	1700.6	1528.4	1134.9	740.2	476.9	354.5	300.0	278.1	268.6	263.3	262.7
30°	1747.9	1546.7	1077.0	643.7	406.5	317.7	283.5	269.2	261.6	256.2	256.2
32.5°	1826.6	1577.5	1016.0	560.4	356.2	292.3	271.0	261.6	255.0	250.9	250.3
35°	1942.6	1635.5	959.1	491.1	320.1	273.9	260.3	253.3	248.5	246.1	246.1
37.5°	2111.3	1727.2	908.9	441.4	298.2	261.6	250.3	245.0	242.0	242.0	242.0
40°	2337.9	1853.8	868.1	408.3	285.8	252.7	242.6	238.4	236.7	237.3	237.3
42.5°	2617.7	2018.3	840.9	385.2	279.9	247.3	237.3	233.7	231.9	231.4	231.9
45°	2936.7	2205.3	837.9	368.1	273.9	243.8	233.7	230.2	226.6	224.2	224.2
47.5°	3246.7	2395.2	862.1	362.1	267.5	239.7	230.8	227.2	221.9	216.6	216.6
50°	3520.7	2556.8	894.7	364.5	265.0	233.7	226.1	224.2	215.9	210.0	209.5
52.5°	3738.4	2681.1	921.3	371.6	267.5	229.6	220.1	220.8	211.9	205.3	204.7
55°	3913.0	2762.7	914.2	378.7	272.8	227.2	214.8	215.9	208.9	202.3	202.3
57.5°	3989.3	2732.5	835.4	372.8	276.9	227.8	210.6	215.4	209.5	203.6	203.6
60°	3825.4	2464.5	688.1	346.8	271.6	226.1	208.9	217.8	217.2	211.2	210.6
62.5°	3329.6	1984.6	533.7	308.3	253.3	217.2	204.2	217.2	223.6	221.9	221.3
65°	2566.3	1413.6	407.6	266.9	228.4	202.3	191.7	203.6	212.5	214.8	214.2
67.5°	1665.7	866.2	314.1	227.8	200.6	185.2	175.7	181.1	182.8	182.8	181.7
70°	819.0	466.3	250.3	191.7	172.2	166.8	161.5	158.6	155.6	153.2	153.2
72.5°	404.2	304.7	205.9	162.1	148.5	146.2	145.0	141.4	139.0	136.1	134.9
75°	298.8	248.0	175.1	136.7	127.8	125.4	127.8	124.8	124.3	121.9	120.7
77.5°	245.6	211.2	150.9	117.1	109.5	105.4	108.8	109.5	110.1	106.5	105.4
80°	199.4	178.7	126.0	97.1	89.9	87.0	89.3	94.1	95.2	89.9	87.6
82.5°	143.8	146.2	101.8	75.7	69.9	67.4	72.2	78.2	79.3	71.6	69.9
85°	120.7	121.9	78.2	53.8	48.0	44.4	52.1	58.0	62.1	54.4	52.7
87.5°	50.3	71.6	45.0	30.2	26.6	23.1	27.8	30.8	37.2	34.3	33.8
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)