

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: P191570

Luminaire Tested: **GLEON-AF-02-LED-E1-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191570  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24147)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-02-LED-E1-T4W  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12371.6 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G3

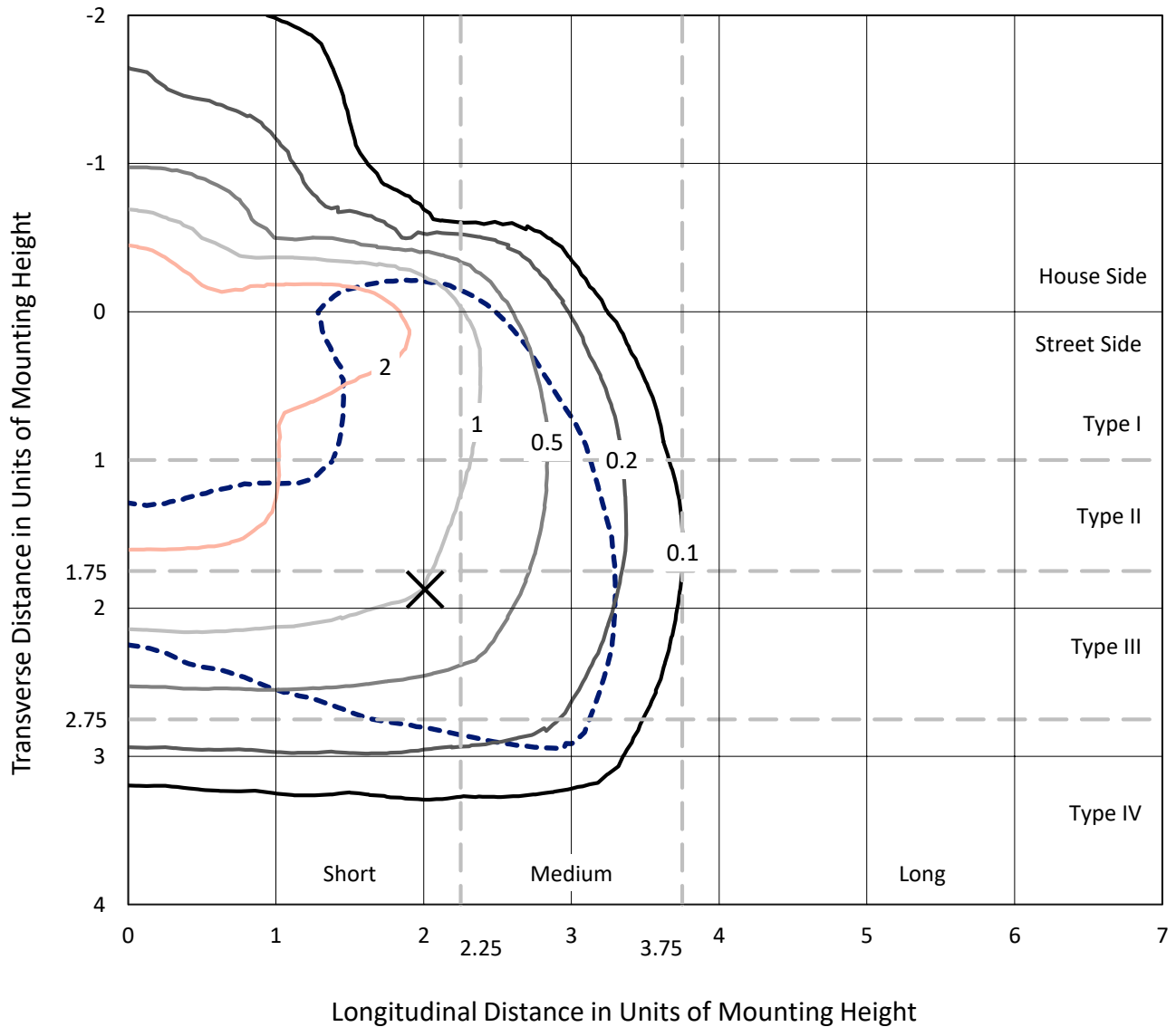
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

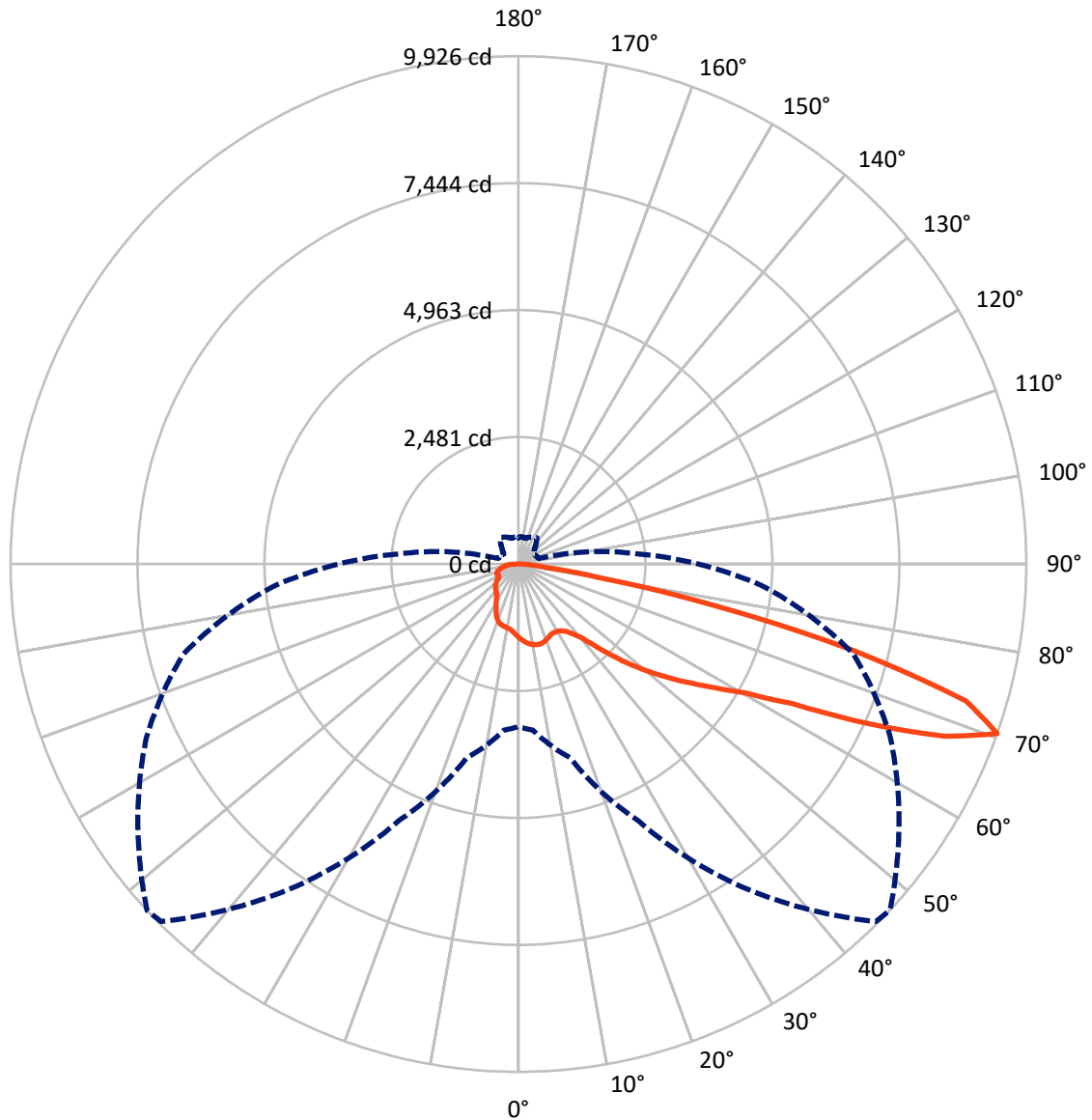
× Max cd  
- - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.1 fc  
Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2581.0	0.0	2581.0
	% Fixture	20.9	0.0	20.9
<b>Street Side</b>	Lumens	9790.6	0.0	9790.6
	% Fixture	79.1	0.0	79.1
<b>Total</b>	Lumens	12371.6	0.0	12371.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.5	1.1
10°-20°	403.5	3.3
20°-30°	595.9	4.8
30°-40°	866.1	7.0
40°-50°	1558.7	12.6
50°-60°	2700.3	21.8
60°-70°	3854.1	31.2
70°-80°	1978.5	16.0
80°-90°	277.0	2.2
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°	12371.6	100.0
0°-180°	12371.6	100.0

**Coefficient of Utilization**



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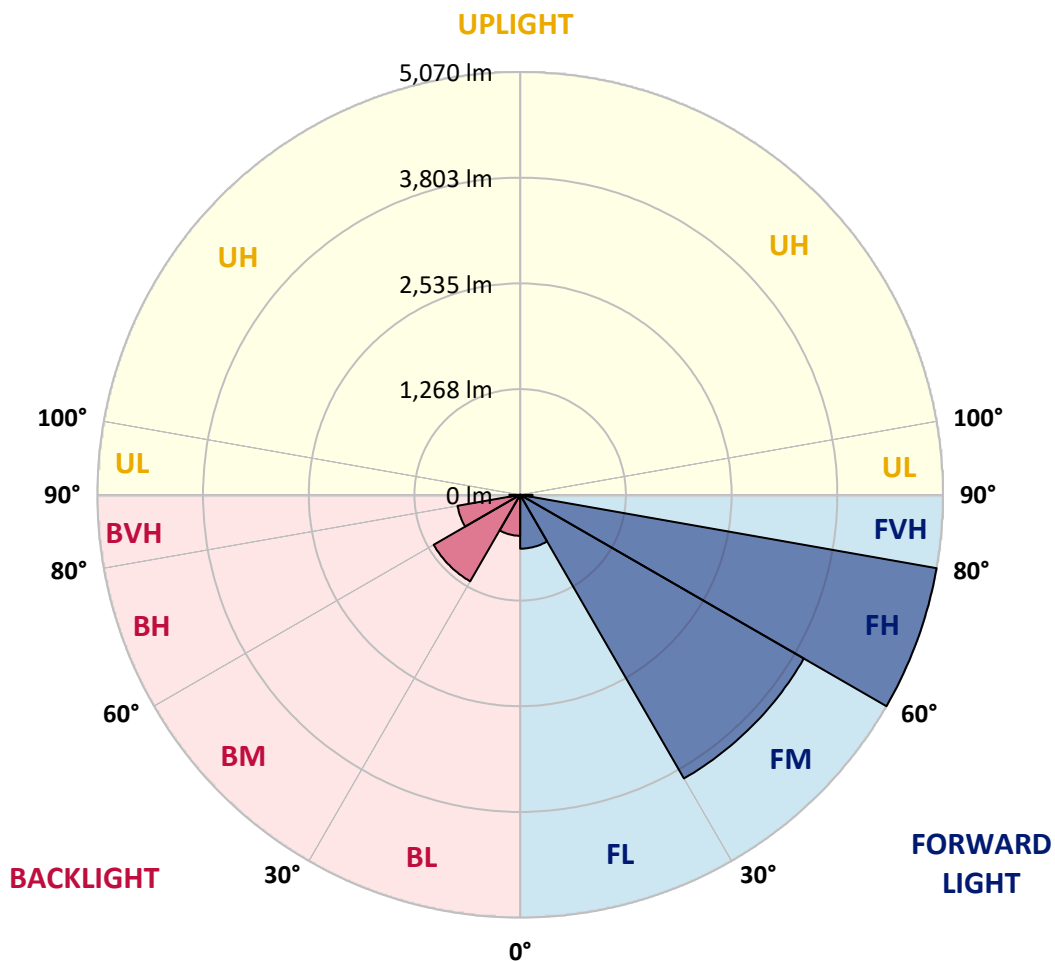
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	645.5	5.2			
FM (30°-60°)	3927.1	31.7			
FH (60°-80°)	5070.2	41.0			G3/7500
FVH (80°-90°)	147.8	1.2			G2/225
BL (0°-30°)	491.4	4.0	B1/500		
BM (30°-60°)	1198.0	9.7	B2/2500		
BH (60°-80°)	762.3	6.2	B2/1000		G2/1000
BVH (80°-90°)	129.2	1.0			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5
2.5°	1519.8	1516.7	1515.5	1513.1	1510.1	1495.0	1492.1	1481.2	1466.2	1450.5	1434.3
5°	1619.6	1619.0	1612.5	1600.4	1581.2	1548.0	1540.3	1513.8	1478.3	1443.9	1409.6
7.5°	1707.5	1702.1	1689.5	1665.4	1631.7	1586.6	1575.8	1539.0	1490.2	1443.3	1396.9
10°	1772.0	1768.9	1741.3	1708.1	1664.2	1614.2	1601.6	1560.7	1507.1	1447.5	1389.8
12.5°	1808.7	1802.6	1770.7	1731.0	1678.7	1629.9	1617.3	1575.8	1515.5	1447.5	1379.6
15°	1806.2	1802.0	1770.1	1726.8	1673.9	1631.1	1619.6	1578.1	1513.8	1441.5	1366.3
17.5°	1758.1	1759.9	1732.8	1690.1	1646.7	1614.2	1604.0	1565.5	1501.7	1429.5	1350.6
20°	1673.9	1682.2	1664.2	1626.3	1602.2	1579.9	1573.3	1540.8	1483.1	1412.0	1333.7
22.5°	1589.6	1597.4	1590.2	1558.3	1554.7	1541.4	1537.8	1514.4	1466.8	1401.1	1323.5
25°	1527.6	1534.8	1533.6	1505.9	1516.7	1516.1	1513.1	1501.7	1463.1	1401.1	1325.3
27.5°	1510.7	1513.1	1510.7	1485.4	1500.5	1512.5	1510.1	1508.3	1474.0	1418.6	1348.2
30°	1568.5	1564.9	1546.2	1495.0	1509.0	1525.7	1523.4	1524.6	1506.5	1464.4	1399.4
32.5°	1799.1	1782.8	1723.8	1579.9	1543.2	1552.2	1553.5	1573.3	1576.4	1534.8	1478.8
35°	2143.9	2125.8	2049.4	1807.5	1649.7	1618.4	1618.4	1648.6	1666.6	1635.9	1602.2
37.5°	2509.2	2489.4	2448.4	2122.8	1873.6	1733.4	1730.4	1751.5	1777.4	1784.5	1793.0
40°	2924.5	2903.4	2914.9	2476.8	2186.0	1932.7	1889.9	1874.9	1944.6	1991.1	2058.5
42.5°	3379.0	3369.3	3373.6	2871.0	2541.7	2230.5	2169.8	2092.1	2176.4	2258.9	2400.3
45°	3799.6	3808.1	3803.8	3292.9	2937.8	2594.1	2529.8	2379.3	2461.7	2603.1	2833.7
47.5°	4168.0	4133.1	4187.2	3753.9	3381.4	3001.0	2921.5	2719.9	2803.6	2978.1	3368.2
50°	4615.2	4610.4	4531.0	4369.0	3917.6	3409.7	3305.6	3072.0	3202.0	3444.6	4041.7
52.5°	5085.3	4998.0	4925.2	4847.6	4486.5	3828.6	3700.9	3422.9	3670.2	3975.4	4862.6
55°	5181.6	5142.5	5232.8	5363.3	5034.8	4263.8	4115.0	3862.9	4197.5	4582.1	5809.3
57.5°	5387.5	5386.9	5573.4	5806.4	5599.3	4725.4	4575.5	4394.3	4790.4	5277.3	6814.5
60°	5526.5	5565.6	5912.2	6364.3	6153.7	5258.7	5120.8	5007.7	5464.5	6054.3	7751.0
62.5°	5599.3	5652.3	6125.3	6590.6	6937.2	6146.4	6008.6	5845.4	6356.5	6906.6	8298.7
65°	5296.5	5400.7	6092.3	6786.3	7623.4	7585.5	7523.5	7237.1	7471.7	7580.1	8100.7
67.5°	4458.7	4565.2	5370.6	6603.9	8113.3	8973.4	8986.7	8497.3	8157.9	7637.9	6810.9
70°	3176.8	3260.3	3926.7	5536.7	7740.2	9880.5	9925.6	9078.2	8021.3	6773.6	4758.5
72.5°	1508.3	1559.5	2190.2	3603.4	6142.2	9052.9	9140.2	8336.6	6820.5	5014.9	2595.9
75°	554.3	570.0	740.3	1533.0	3562.5	6676.1	6779.0	5976.1	4521.3	2496.6	988.9
77.5°	332.3	342.5	415.3	647.0	1401.1	3815.9	3968.2	3250.1	1975.9	929.4	486.3
80°	232.3	239.6	297.9	402.6	662.1	1454.1	1589.6	1326.6	787.3	588.0	353.9
82.5°	157.1	160.7	209.5	272.0	440.0	519.5	560.4	589.8	530.8	437.6	224.5
85°	102.9	106.5	142.1	179.3	279.9	268.4	274.5	347.3	387.6	297.4	124.6
87.5°	59.0	61.4	85.4	95.7	137.3	113.8	115.0	183.0	248.0	200.4	75.8
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°	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5
2.5°	1430.1	1422.2	1404.8	1394.0	1383.7	1381.3	1377.1	1376.5	1375.9	1375.9	1374.1
5°	1398.2	1385.0	1357.9	1342.8	1330.1	1328.9	1328.3	1331.4	1332.6	1333.7	1332.0
7.5°	1377.7	1359.6	1325.9	1304.3	1289.2	1285.6	1291.7	1305.5	1314.5	1318.1	1316.3
10°	1365.0	1342.8	1303.6	1280.2	1267.5	1265.8	1273.6	1289.8	1308.5	1315.7	1315.1
12.5°	1350.6	1325.3	1283.8	1259.2	1251.9	1255.6	1265.8	1280.8	1300.1	1311.5	1312.1
15°	1336.2	1306.7	1264.0	1242.3	1239.3	1244.1	1253.7	1265.2	1280.2	1291.7	1292.8
17.5°	1318.7	1288.0	1245.3	1223.0	1220.6	1223.0	1223.7	1229.7	1239.3	1250.1	1253.1
20°	1300.1	1268.8	1224.3	1202.0	1191.1	1181.5	1170.7	1171.9	1174.9	1185.7	1188.2
22.5°	1286.9	1255.6	1208.0	1177.3	1148.4	1119.5	1097.8	1094.9	1096.0	1105.1	1108.1
25°	1288.0	1255.0	1203.8	1150.8	1087.6	1041.3	1012.4	1007.5	1007.0	1013.5	1017.7
27.5°	1311.5	1278.4	1219.5	1123.7	1021.4	952.8	922.1	918.5	913.7	915.4	920.2
30°	1363.9	1333.2	1257.3	1096.0	949.8	866.1	834.2	830.6	824.0	820.9	824.6
32.5°	1449.3	1424.0	1312.8	1069.5	878.1	792.1	759.5	751.8	747.6	743.9	747.0
35°	1591.4	1580.6	1386.7	1040.6	815.0	734.9	705.4	693.4	687.3	694.0	698.8
37.5°	1814.1	1820.1	1483.7	995.5	766.2	696.9	672.3	658.5	649.5	654.9	660.3
40°	2129.5	2133.7	1590.8	931.7	724.0	674.7	648.2	635.6	623.0	613.4	612.7
42.5°	2543.6	2500.8	1696.1	862.4	675.4	660.8	631.4	615.7	596.5	570.0	564.6
45°	3034.7	2884.8	1776.1	783.1	620.5	644.0	612.7	591.1	561.0	532.0	529.1
47.5°	3600.5	3297.1	1815.2	700.6	569.4	619.3	589.8	555.6	517.6	503.2	501.3
50°	4291.4	3786.5	1833.9	620.5	524.9	586.9	556.7	516.4	484.5	481.5	479.7
52.5°	5078.0	4375.1	1840.0	555.0	488.2	544.7	529.7	490.5	465.2	467.7	467.7
55°	5901.4	4983.0	1758.1	507.4	454.4	501.3	511.6	480.3	459.2	468.8	472.5
57.5°	6657.4	5521.7	1500.5	470.7	422.5	468.3	504.9	489.9	475.5	514.6	517.0
60°	7237.6	5840.0	1120.7	437.6	399.1	456.8	522.4	526.6	530.3	623.6	636.2
62.5°	7359.2	5734.2	770.4	411.7	388.2	466.5	554.3	555.0	550.8	615.7	623.6
65°	6801.3	5064.2	560.4	397.2	379.2	484.0	581.4	568.8	541.1	590.4	576.0
67.5°	5401.3	3815.3	466.5	386.4	365.9	482.7	610.3	581.4	535.7	578.4	555.0
70°	3506.0	2307.1	415.3	377.4	350.3	459.8	627.2	580.2	520.1	538.1	510.4
72.5°	1710.6	1031.6	380.9	364.2	334.0	427.9	626.6	569.4	503.8	502.6	487.5
75°	669.3	472.5	349.6	344.3	306.4	391.8	609.7	553.7	484.5	465.2	459.8
77.5°	391.8	337.1	310.0	314.8	273.2	355.7	585.0	526.6	458.1	435.2	429.1
80°	285.3	252.2	264.2	272.0	233.5	319.6	551.9	493.6	428.5	440.0	431.6
82.5°	183.0	162.5	214.3	222.1	194.4	282.8	515.8	458.6	387.0	351.5	343.1
85°	93.3	102.9	159.5	169.1	149.9	232.3	471.9	412.2	340.0	292.6	297.4
87.5°	52.4	70.4	101.7	113.8	106.0	178.7	382.8	340.0	277.4	225.7	198.7
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)