

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: P301147

Luminaire Tested: **GLNA-AF-02-LED-E1-T3R-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301147
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194839)
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-T3R-7030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9696.2 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

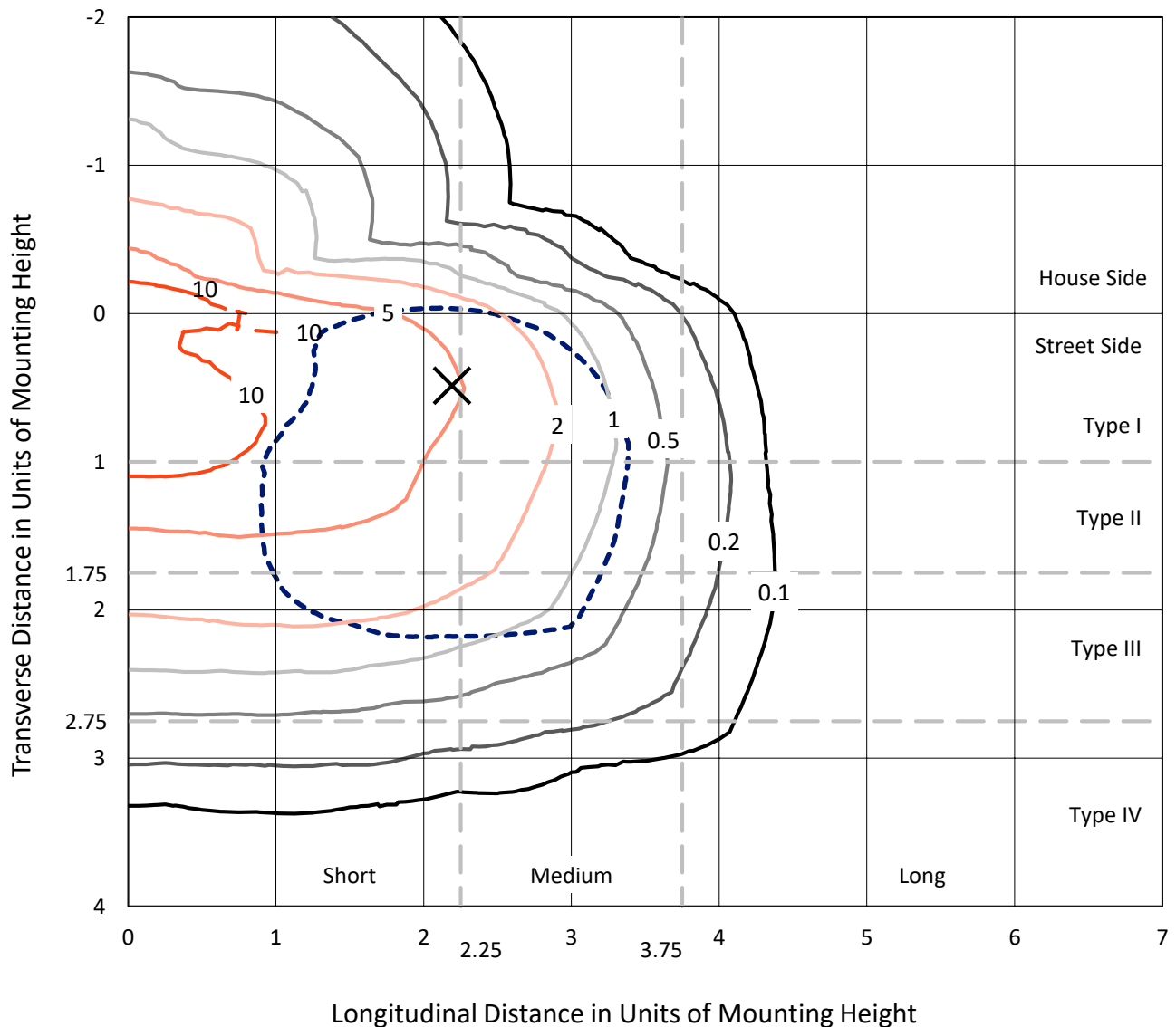
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

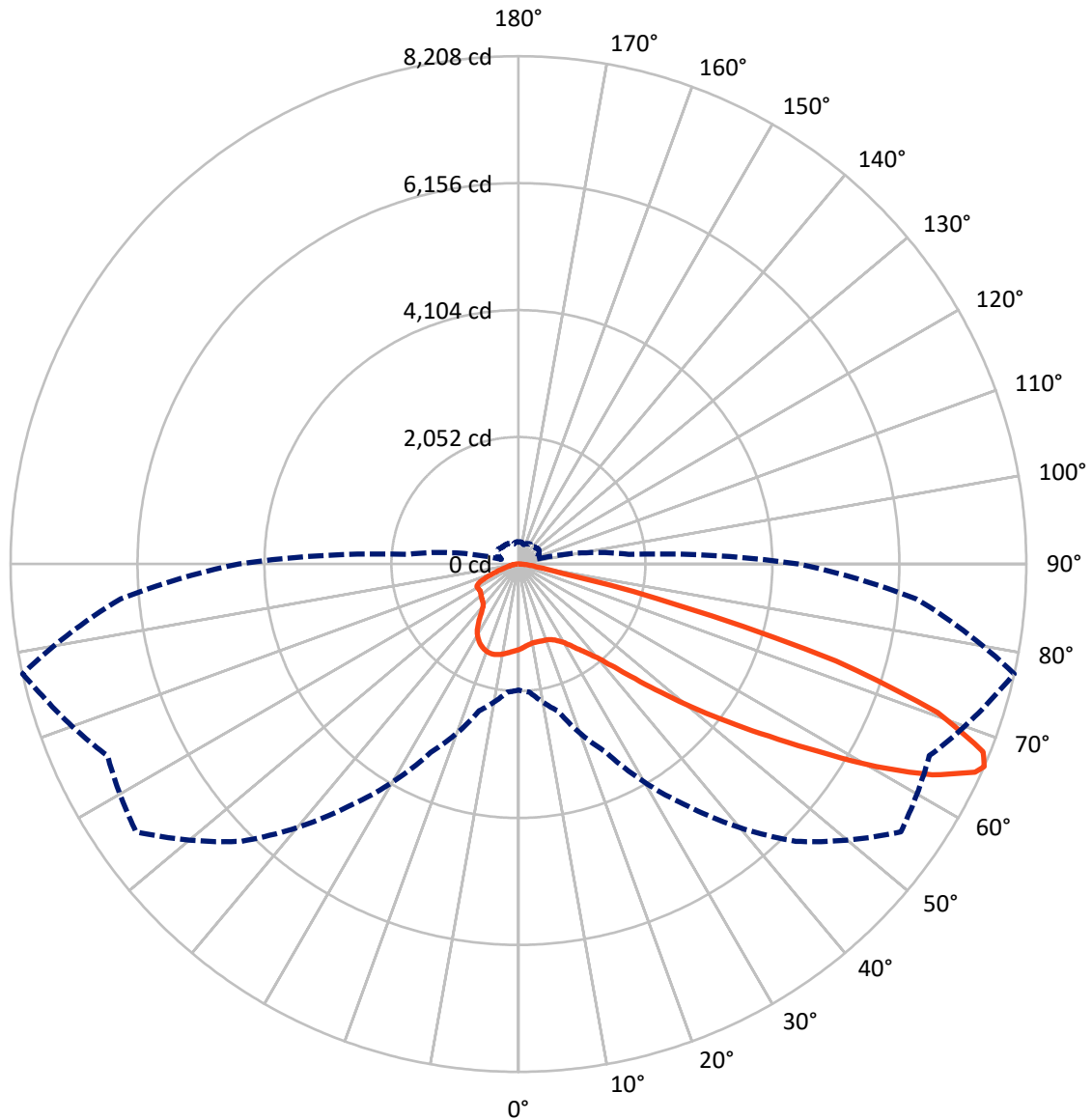
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 17 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1656.5	0.0	1656.5
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	8039.6	0.0	8039.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	9696.2	0.0	9696.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.4	1.3
10°-20°	348.3	3.6
20°-30°	594.4	6.1
30°-40°	951.5	9.8
40°-50°	1469.9	15.2
50°-60°	2084.9	21.5
60°-70°	2789.0	28.8
70°-80°	1211.2	12.5
80°-90°	123.5	1.3
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°	9696.2	100.0
0°-180°	9696.2	100.0



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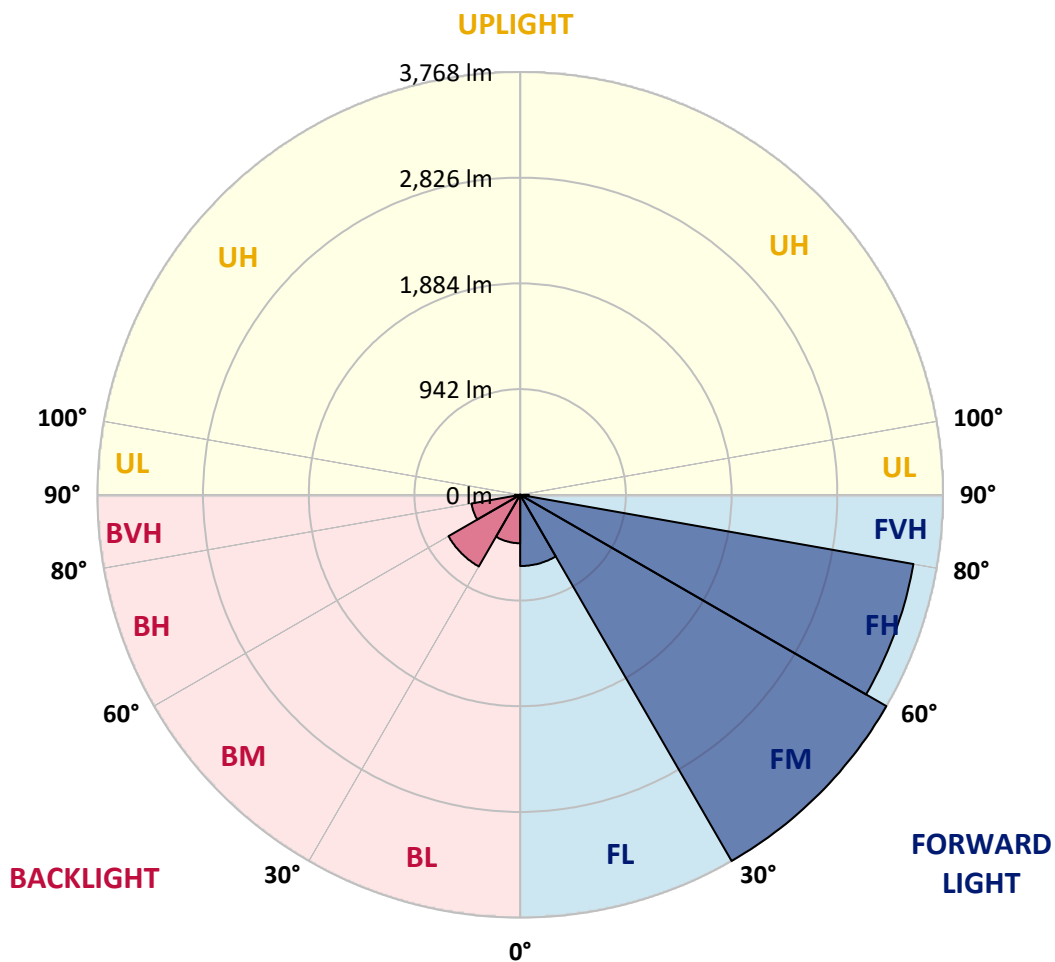
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	634.7	6.5			
FM (30°-60°)	3768.4	38.9			
FH (60°-80°)	3559.1	36.7			G2/5000
FVH (80°-90°)	77.5	0.8			G1/100
BL (0°-30°)	431.4	4.4	B1/500		
BM (30°-60°)	737.9	7.6	B1/1000		
BH (60°-80°)	441.2	4.5	B1/500		G1/500
BVH (80°-90°)	46.0	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	1381.7	1381.7	1381.7	1381.7	1381.7	1381.7	1381.7	1381.7	1381.7	1381.7	1381.7
2.5°	1222.4	1230.5	1237.5	1243.9	1256.6	1277.7	1302.0	1321.7	1350.1	1355.7	1370.8
5°	1110.1	1110.1	1115.5	1125.3	1142.6	1174.2	1207.2	1251.2	1313.1	1327.6	1368.0
7.5°	1055.6	1056.0	1059.2	1067.4	1082.5	1111.4	1147.6	1199.5	1283.2	1307.5	1376.2
10°	1075.7	1071.2	1064.2	1060.2	1062.4	1079.3	1113.7	1171.4	1264.9	1296.0	1394.6
12.5°	1188.4	1179.8	1155.9	1124.3	1094.0	1081.7	1101.8	1158.1	1257.2	1293.4	1418.9
15°	1372.6	1369.0	1324.4	1259.0	1185.7	1124.3	1110.5	1153.1	1258.0	1296.6	1447.8
17.5°	1603.5	1598.4	1539.9	1444.6	1325.0	1205.4	1141.2	1157.3	1261.2	1302.0	1475.6
20°	1836.7	1821.0	1757.9	1644.3	1490.8	1315.7	1192.1	1167.8	1265.4	1307.9	1505.1
22.5°	2010.8	1997.9	1941.2	1830.8	1653.9	1443.6	1260.4	1186.1	1278.7	1325.4	1541.1
25°	2163.8	2164.6	2108.3	2001.7	1818.8	1579.3	1348.3	1235.1	1312.5	1361.1	1590.6
27.5°	2353.0	2342.1	2289.3	2183.5	1982.0	1716.2	1454.6	1302.5	1363.0	1412.0	1655.7
30°	2579.3	2571.5	2510.6	2390.6	2162.8	1863.2	1575.9	1380.8	1428.1	1478.8	1740.9
32.5°	2845.5	2841.8	2778.6	2624.2	2371.7	2036.5	1718.5	1484.4	1525.2	1577.9	1863.2
35°	3158.0	3158.4	3083.8	2898.2	2600.3	2238.0	1880.1	1617.7	1643.4	1698.3	2009.0
37.5°	3350.4	3373.7	3345.8	3156.6	2859.2	2463.4	2090.0	1794.5	1778.0	1833.5	2165.2
40°	3391.6	3420.0	3508.4	3412.2	3148.8	2711.7	2276.0	1964.5	1943.9	2011.6	2366.3
42.5°	3333.9	3373.3	3560.2	3627.9	3456.2	3017.7	2526.1	2216.9	2190.9	2282.0	2616.4
45°	3299.5	3328.9	3545.1	3740.3	3722.8	3363.7	2844.6	2533.9	2524.3	2643.9	2905.1
47.5°	3240.0	3266.6	3474.5	3766.4	3879.6	3680.7	3227.2	2921.6	2940.3	3097.1	3230.8
50°	3272.0	3283.0	3395.7	3699.9	3924.9	3913.0	3654.6	3370.5	3434.7	3630.3	3599.6
52.5°	3267.4	3295.9	3386.6	3590.9	3930.9	4056.4	4075.6	3871.2	4006.5	4230.9	4008.7
55°	2641.7	2693.8	3278.9	3563.4	3951.8	4196.9	4450.4	4399.1	4651.0	4912.6	4470.5
57.5°	2522.5	2555.5	2879.9	3621.1	4063.6	4465.5	4867.2	4980.0	5401.4	5705.2	5033.1
60°	2499.1	2539.9	2875.7	3691.7	4290.4	4903.0	5485.3	5683.3	6314.6	6647.2	5685.5
62.5°	2426.3	2470.2	2848.6	3682.5	4612.5	5508.2	6276.6	6430.9	7180.4	7503.9	6231.2
65°	2195.4	2236.6	2628.4	3534.6	4829.8	6154.2	7212.9	7116.3	7864.0	8107.2	6503.2
66°	2037.3	2077.7	2454.7	3360.5	4779.3	6337.4	7544.7	7328.4	8017.0	8207.6	6450.1
67.5°	1748.2	1779.8	2117.5	2970.6	4511.3	6388.8	7823.6	7487.8	8033.0	8100.4	6146.4
70°	1104.6	1113.7	1376.2	2050.6	3415.0	5540.7	7398.9	7092.1	7370.6	7188.2	5152.7
72.5°	479.3	476.1	660.7	1043.1	1933.4	3717.8	5985.1	5851.8	5781.8	5365.8	3607.0
75°	266.6	270.4	343.2	484.3	785.7	1826.2	3915.2	3746.7	3163.4	2699.4	1635.6
77.5°	213.9	219.0	284.5	343.6	352.8	636.8	1832.1	1490.8	897.5	720.2	454.4
80°	169.1	178.2	248.3	267.6	237.8	262.4	591.9	473.3	355.1	325.7	235.5
82.5°	133.7	140.2	213.1	202.5	166.3	176.9	283.5	276.3	231.0	210.3	136.1
85°	96.3	108.1	175.1	152.6	109.0	119.2	188.2	180.5	132.3	108.1	60.1
87.5°	39.4	51.3	123.7	101.3	60.9	55.5	93.9	88.4	62.7	45.8	29.8
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°	1381.7	1381.7	1381.7	1381.7	1381.7	1381.7	1381.7	1381.7	1381.7	1381.7	1381.7
2.5°	1380.3	1391.3	1405.6	1414.3	1418.9	1422.1	1427.1	1426.7	1428.1	1428.5	1430.3
5°	1389.5	1407.8	1428.5	1434.0	1434.0	1428.9	1423.9	1415.6	1412.4	1411.6	1412.4
7.5°	1413.4	1433.5	1451.4	1445.0	1431.3	1411.0	1384.9	1362.0	1349.7	1345.5	1344.7
10°	1443.6	1467.9	1475.2	1451.0	1410.6	1362.0	1310.3	1272.7	1251.2	1245.2	1243.4
12.5°	1480.2	1503.1	1493.1	1441.8	1367.0	1288.8	1217.2	1157.3	1112.4	1098.2	1097.2
15°	1520.6	1538.5	1503.1	1413.4	1302.0	1186.6	1059.2	955.7	899.8	881.9	880.6
17.5°	1558.2	1567.3	1497.1	1363.8	1206.3	1019.4	850.3	770.6	751.4	756.0	756.8
20°	1590.2	1590.2	1477.0	1292.8	1055.6	799.0	692.2	690.9	704.7	718.4	721.2
22.5°	1625.5	1604.4	1441.8	1192.5	842.0	653.8	638.2	651.0	666.5	681.6	684.0
25°	1669.0	1615.9	1392.7	1040.5	661.9	593.7	599.7	610.2	618.0	627.7	629.1
27.5°	1717.6	1630.5	1328.2	831.0	574.6	556.2	560.8	564.4	563.5	567.2	568.0
30°	1775.7	1647.5	1239.7	649.6	538.4	524.1	515.9	512.7	512.7	518.7	520.9
32.5°	1853.6	1672.6	1112.8	556.7	520.9	501.2	474.7	462.8	467.3	487.4	492.0
35°	1939.4	1699.7	941.0	525.0	517.3	490.6	449.4	427.4	427.9	446.7	452.6
37.5°	2032.7	1734.1	752.7	519.1	525.5	491.2	436.1	405.9	393.5	393.5	395.9
40°	2152.3	1769.3	609.4	523.2	542.9	496.6	429.3	389.0	354.1	355.1	356.9
42.5°	2308.1	1799.5	532.4	531.8	564.0	503.9	428.8	366.5	336.2	356.9	375.6
45°	2481.3	1814.7	498.4	539.7	580.9	508.5	421.6	362.9	338.6	399.9	435.7
47.5°	2680.5	1805.9	479.7	542.4	585.1	508.5	413.2	371.6	354.6	463.2	504.9
50°	2899.1	1780.8	461.4	537.0	583.7	507.6	421.0	380.2	360.5	474.1	503.0
52.5°	3156.2	1759.7	442.1	525.0	574.0	502.6	430.2	376.6	341.8	431.1	451.2
55°	3449.3	1765.7	420.6	508.1	558.9	493.0	427.0	361.9	322.1	379.8	392.1
57.5°	3824.1	1836.7	394.9	486.6	538.4	476.9	415.6	355.1	316.1	344.6	351.9
60°	4242.3	1960.3	362.9	465.0	512.7	451.2	406.8	358.3	318.9	341.8	345.4
62.5°	4549.3	2032.3	335.4	433.3	477.9	422.8	395.9	362.3	326.3	351.4	350.5
65°	4632.6	1914.1	301.0	387.2	430.7	393.1	382.0	366.9	329.4	359.1	355.1
66°	4515.9	1786.8	285.9	365.7	406.8	378.4	375.2	366.5	328.1	360.1	353.2
67.5°	4232.3	1525.6	259.8	334.0	368.8	356.5	364.3	362.3	324.3	359.1	349.6
70°	3451.6	1040.9	222.2	278.1	307.0	313.8	343.2	347.8	312.4	343.2	322.1
72.5°	2411.7	634.1	196.6	215.8	248.3	267.6	314.3	327.5	296.4	299.6	279.5
75°	1165.5	336.8	178.2	167.3	192.8	223.6	279.5	300.0	271.2	250.7	243.3
77.5°	363.3	205.7	151.2	134.7	151.2	180.5	233.6	263.0	241.5	209.9	207.1
80°	195.2	151.2	116.4	108.1	119.6	141.6	183.7	219.4	207.5	188.2	168.1
82.5°	128.7	98.1	86.1	83.8	91.1	108.1	136.5	181.9	181.9	161.3	117.4
85°	66.4	60.1	59.1	59.1	63.7	72.0	92.9	140.2	149.4	85.2	70.6
87.5°	33.0	34.4	32.0	33.4	35.8	35.2	44.4	70.6	84.3	51.7	43.0
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)