

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: P299167

Luminaire Tested: **GLNA-AF-03-LED-E1-T3-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299167
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-03-LED-E1-T3-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12714.2 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 124
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

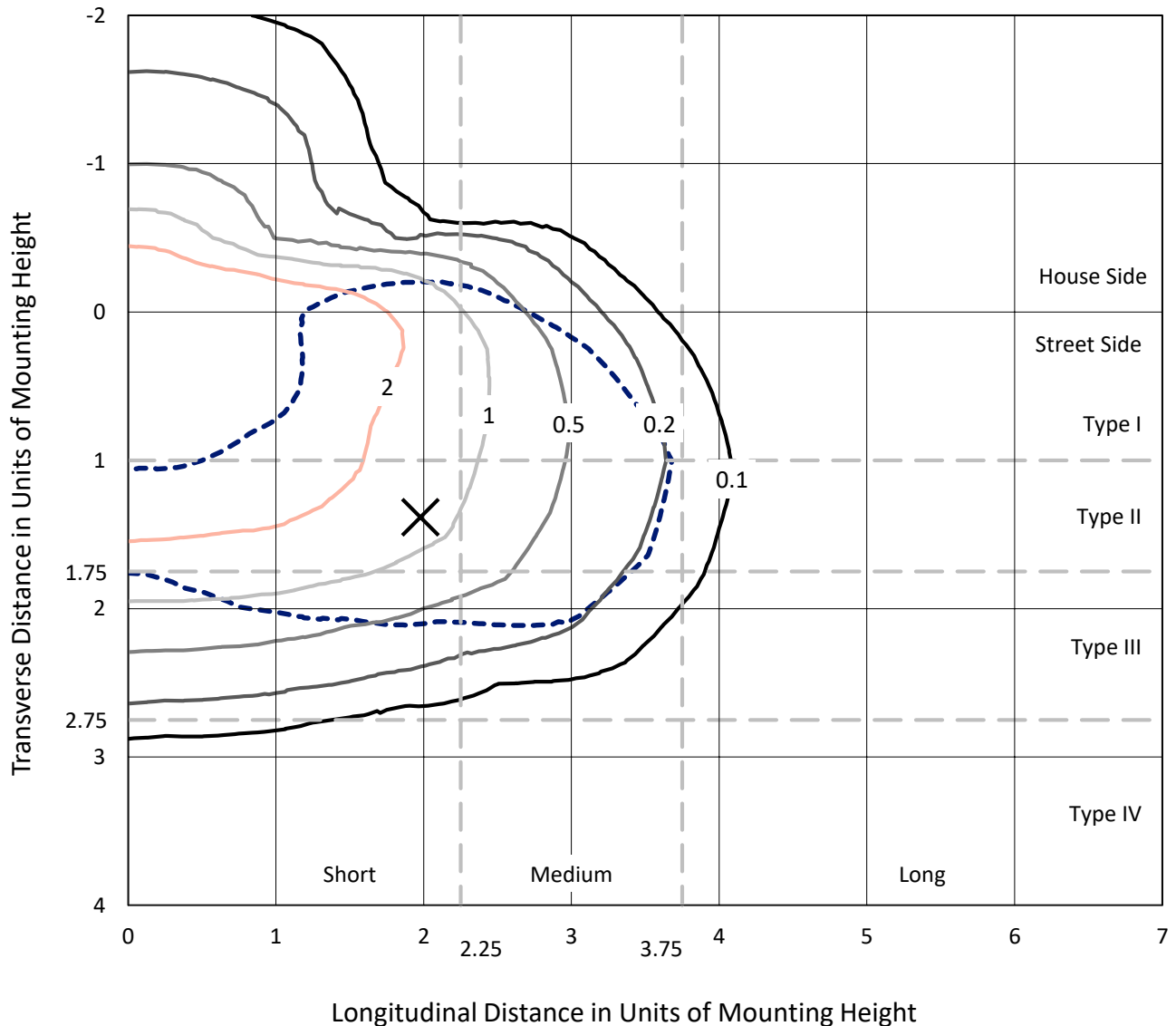


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Iso-Footcandle Lines of Horizontal Illumination

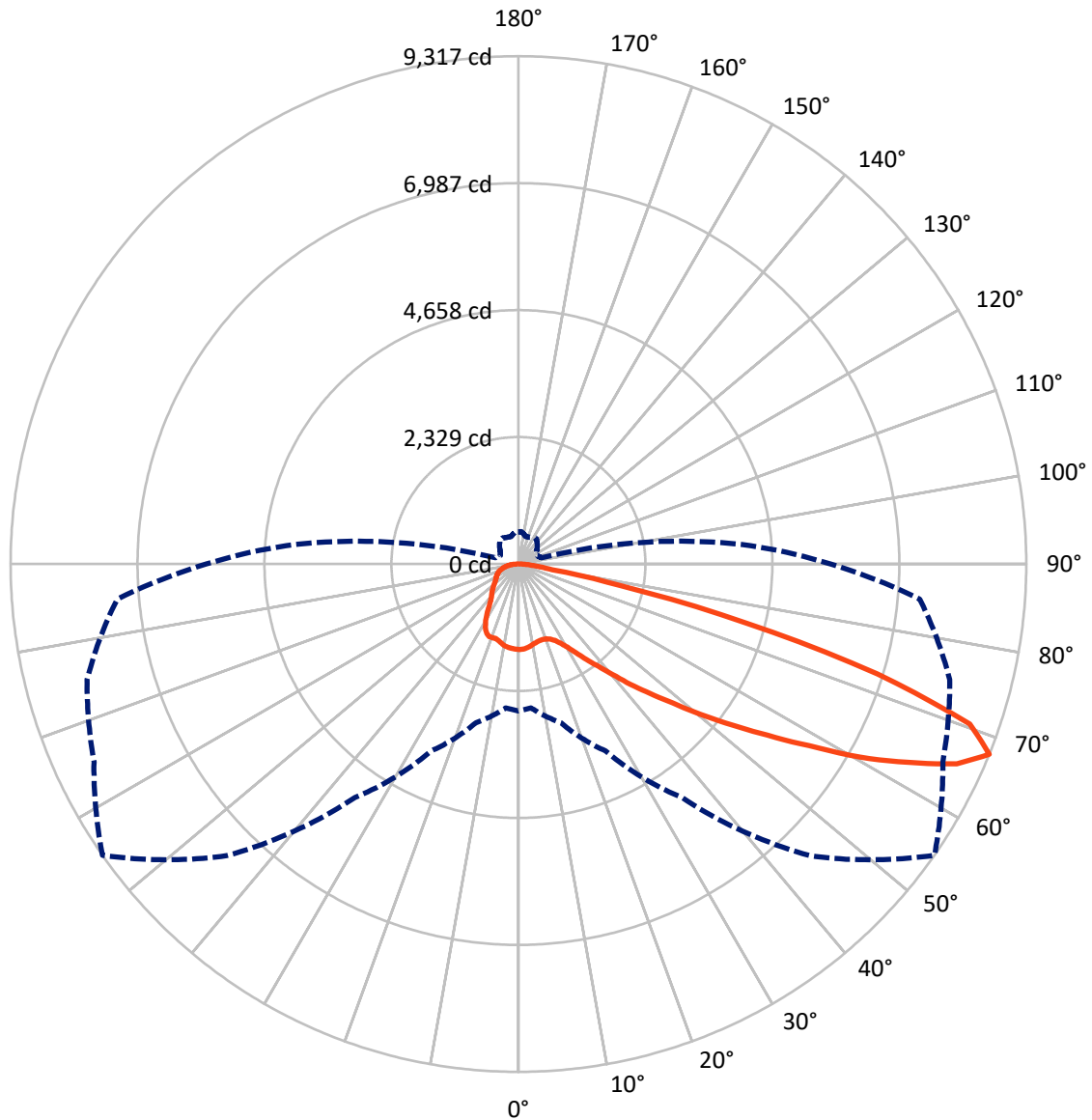
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2746.5	0.0	2746.5
	% Fixture	21.6	0.0	21.6
Street Side	Lumens	9967.7	0.0	9967.7
	% Fixture	78.4	0.0	78.4
Total	Lumens	12714.2	0.0	12714.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.3	1.2
10°-20°	414.4	3.3
20°-30°	694.3	5.5
30°-40°	1141.7	9.0
40°-50°	1921.8	15.1
50°-60°	3024.7	23.8
60°-70°	3609.6	28.4
70°-80°	1550.1	12.2
80°-90°	211.3	1.7
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°	12714.2	100.0
0°-180°	12714.2	100.0



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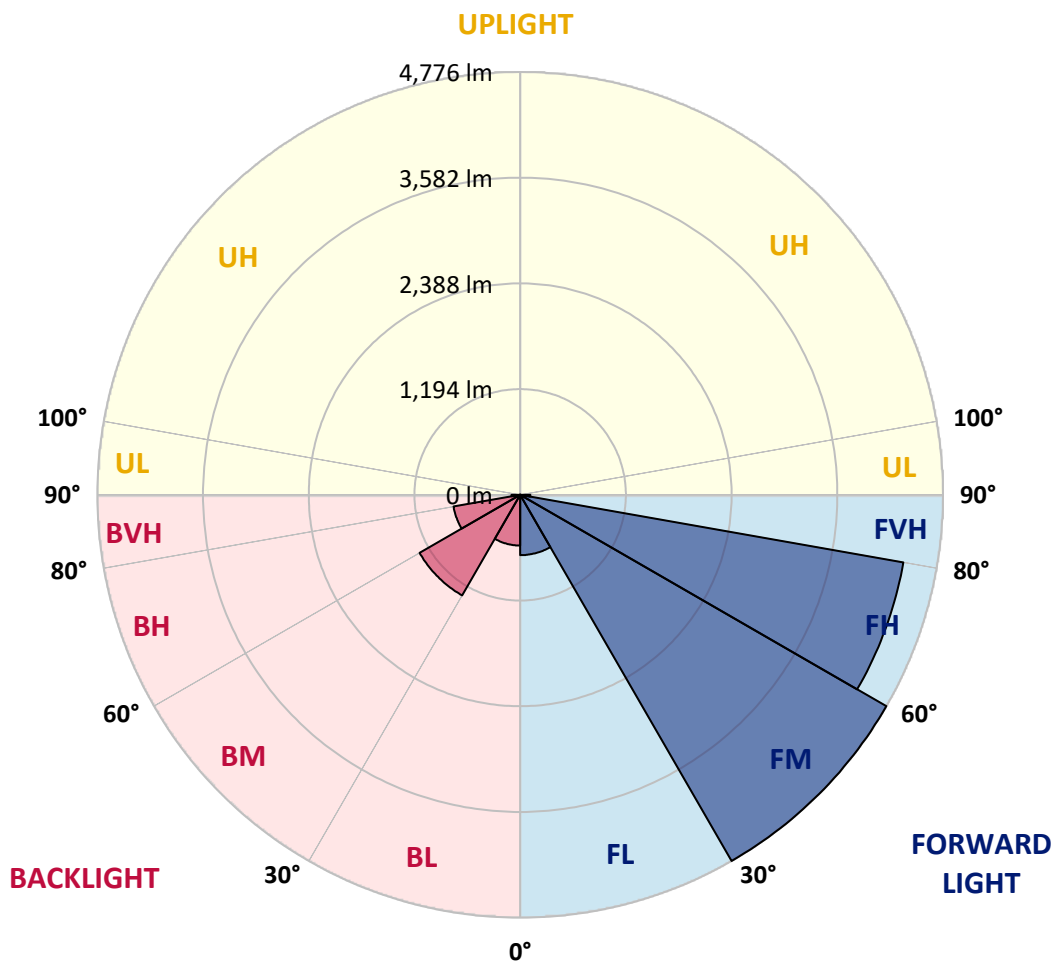
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	681.5	5.4			
FM (30°-60°)	4776.4	37.6			
FH (60°-80°)	4395.4	34.6			G2/5000
FVH (80°-90°)	114.4	0.9			G2/225
BL (0°-30°)	573.5	4.5	B2/1000		
BM (30°-60°)	1311.7	10.3	B2/2500		
BH (60°-80°)	764.3	6.0	B2/1000		G2/1000
BVH (80°-90°)	96.9	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8
2.5°	1554.3	1554.9	1556.1	1561.0	1565.3	1564.1	1564.7	1562.3	1561.7	1558.0	1561.7
5°	1534.6	1536.5	1537.1	1545.1	1550.0	1551.2	1549.4	1546.3	1542.6	1538.9	1540.8
7.5°	1489.8	1494.7	1495.3	1506.4	1514.4	1524.8	1525.4	1526.0	1524.2	1521.7	1525.4
10°	1461.6	1462.8	1462.2	1470.2	1476.3	1488.0	1494.7	1506.4	1511.3	1512.5	1515.0
12.5°	1459.7	1458.5	1456.6	1456.6	1454.8	1459.7	1472.0	1488.6	1500.2	1503.9	1507.0
15°	1479.4	1478.8	1472.6	1463.4	1451.7	1448.1	1458.5	1476.9	1492.3	1500.2	1503.3
17.5°	1523.6	1519.9	1510.1	1489.2	1464.0	1454.2	1455.4	1470.8	1488.6	1499.0	1502.1
20°	1604.6	1604.6	1583.8	1544.5	1499.6	1476.3	1465.2	1474.5	1491.7	1505.8	1510.1
22.5°	1744.7	1745.9	1710.9	1646.4	1570.9	1521.1	1493.5	1491.7	1511.9	1527.9	1532.8
25°	1943.0	1938.1	1889.0	1796.9	1682.0	1599.7	1551.8	1540.8	1558.0	1575.8	1581.9
27.5°	2173.9	2156.1	2097.8	1986.6	1838.0	1717.6	1643.9	1626.1	1642.7	1663.0	1669.1
30°	2402.4	2383.9	2314.5	2193.0	2027.8	1875.5	1769.8	1741.0	1764.3	1793.2	1796.9
32.5°	2630.8	2630.8	2553.4	2411.6	2231.6	2064.0	1937.5	1903.1	1941.8	1976.8	1984.8
35°	2904.1	2905.3	2830.4	2659.7	2466.2	2288.8	2149.4	2124.2	2182.5	2207.1	2226.1
37.5°	3240.0	3246.8	3150.3	2944.0	2732.1	2545.4	2379.6	2345.3	2403.6	2470.5	2531.9
40°	3602.9	3611.5	3505.3	3251.1	3039.2	2843.9	2664.6	2602.6	2699.6	2827.3	2906.5
42.5°	3949.3	3993.5	3890.9	3629.3	3401.5	3199.5	3017.7	2927.4	3049.0	3241.8	3310.6
45°	4449.8	4481.7	4303.0	4066.0	3851.6	3625.7	3384.9	3289.7	3459.8	3703.0	3717.2
47.5°	4783.2	4759.3	4668.4	4521.0	4385.3	4174.0	3811.7	3707.3	3933.3	4219.5	4140.3
50°	4960.7	4968.1	4955.8	4964.4	4969.3	4836.7	4334.9	4191.9	4461.4	4807.2	4624.8
52.5°	5126.5	5077.4	5117.9	5319.3	5562.5	5513.4	4904.2	4755.0	5027.6	5459.4	5137.0
55°	5122.8	5047.9	5179.9	5535.5	6063.0	6119.5	5543.5	5371.5	5626.4	6158.8	5679.8
57.5°	4941.7	4945.4	5148.6	5614.1	6411.8	6689.4	6285.3	6027.4	6261.4	6867.5	6175.4
60°	4692.3	4726.1	5019.0	5601.2	6691.2	7156.7	7195.4	6734.2	6883.5	7511.7	6585.6
62.5°	4290.1	4325.7	4729.8	5467.3	6648.9	7606.9	8018.3	7536.2	7533.8	7902.3	6706.0
65°	3655.7	3645.3	4069.6	4966.8	6293.3	7939.7	8835.7	8229.6	8023.8	7908.4	6464.0
67.5°	2695.9	2649.2	3013.4	3782.9	5230.9	7567.0	9316.5	8590.7	8190.9	7388.2	5724.6
70°	1398.9	1352.3	1647.0	2208.9	3440.2	5905.8	8784.1	8404.0	7821.8	6193.2	4484.8
72.5°	598.1	590.2	709.9	969.1	1664.2	3406.4	6887.8	7274.0	6711.5	4614.4	3083.4
75°	402.2	399.8	444.6	528.1	748.6	1382.3	4310.4	5163.4	4910.4	2861.1	1734.2
77.5°	315.6	312.6	339.0	379.5	485.1	545.3	1912.9	2772.1	2565.7	1245.4	759.0
80°	246.9	244.4	261.0	283.1	348.8	343.9	629.5	1102.9	853.6	477.2	369.1
82.5°	194.7	194.7	208.2	208.8	247.5	234.6	328.5	485.8	426.2	278.2	226.0
85°	178.1	178.1	192.2	156.0	161.5	148.0	203.9	288.0	270.2	114.2	98.3
87.5°	89.7	87.2	161.5	138.2	87.8	78.6	99.5	139.4	149.8	63.3	49.1
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8
2.5°	1560.4	1559.8	1561.0	1561.7	1566.6	1573.3	1576.4	1580.7	1583.2	1581.9
5°	1542.0	1543.2	1548.1	1551.8	1560.4	1571.5	1577.6	1582.5	1586.8	1585.0
7.5°	1526.7	1529.7	1537.1	1540.2	1545.1	1548.1	1547.5	1549.4	1553.1	1548.8
10°	1518.1	1521.7	1527.3	1523.0	1511.3	1494.7	1479.4	1471.4	1473.8	1470.8
12.5°	1509.5	1514.4	1510.1	1489.8	1457.3	1435.8	1424.1	1425.3	1430.9	1432.1
15°	1504.5	1506.4	1488.0	1449.9	1416.7	1413.7	1419.8	1418.6	1419.2	1419.2
17.5°	1504.5	1499.6	1465.2	1427.2	1413.0	1407.5	1388.5	1364.5	1354.1	1350.4
20°	1512.5	1499.6	1457.9	1432.7	1402.0	1354.7	1304.4	1260.1	1240.5	1235.0
22.5°	1536.5	1514.4	1478.8	1435.2	1348.0	1268.7	1188.9	1136.1	1100.5	1094.3
25°	1585.0	1560.4	1519.9	1402.6	1262.0	1149.0	1058.1	999.1	963.5	958.6
27.5°	1669.7	1653.8	1542.0	1330.8	1147.8	1026.8	942.6	897.2	870.8	869.0
30°	1797.5	1789.5	1531.0	1224.5	1007.1	908.3	867.7	841.3	821.7	821.1
32.5°	2001.4	1936.9	1494.7	1094.9	878.8	824.1	807.5	791.6	776.2	776.2
35°	2263.6	2056.0	1425.9	956.2	800.8	777.5	756.6	731.4	711.1	709.9
37.5°	2571.9	2129.7	1302.5	844.4	763.9	746.1	715.4	678.0	642.3	636.2
40°	2883.2	2151.8	1128.7	775.6	740.6	714.8	677.4	633.1	598.7	596.9
42.5°	3168.8	2109.4	944.5	728.3	717.3	682.9	643.6	604.3	577.3	576.6
45°	3408.3	1999.5	789.7	683.5	692.7	654.0	619.0	587.1	566.2	561.9
47.5°	3633.6	1844.1	681.0	636.2	668.1	638.1	608.6	578.5	558.2	555.1
50°	3895.2	1676.5	604.9	590.2	646.6	632.5	617.2	585.9	552.1	548.4
52.5°	4212.1	1531.6	545.3	549.6	630.1	639.9	639.3	606.7	547.8	542.9
55°	4565.8	1370.7	500.5	516.5	623.3	653.4	644.8	626.4	551.5	544.1
57.5°	4914.0	1182.8	469.2	491.3	613.5	652.2	618.4	592.0	560.1	549.6
60°	5175.0	930.4	445.2	469.2	592.0	631.9	589.5	554.5	558.2	550.2
62.5°	5192.2	719.1	416.4	450.1	559.4	611.6	570.5	538.0	566.2	558.8
65°	4887.0	543.5	388.7	427.4	524.4	598.7	552.1	528.7	582.8	574.8
67.5°	4114.5	437.2	365.4	404.1	489.4	571.7	535.5	520.1	597.5	583.4
70°	2970.4	372.8	342.7	375.8	458.1	541.0	520.8	504.8	557.6	535.5
72.5°	1828.8	323.0	316.9	338.4	434.2	509.1	498.6	475.9	502.3	484.5
75°	913.2	280.0	288.0	301.5	400.4	472.9	461.8	439.1	442.8	439.1
77.5°	437.2	239.5	254.2	264.7	356.8	431.7	420.0	396.7	392.4	393.0
80°	277.0	200.2	214.3	221.7	318.7	383.8	372.1	348.8	397.9	369.1
82.5°	173.2	162.7	166.4	179.9	277.6	334.1	318.7	297.8	358.6	283.7
85°	95.8	113.6	118.5	130.2	213.7	279.4	264.1	237.7	213.1	209.4
87.5°	57.1	67.6	69.4	78.0	143.7	202.0	178.7	169.5	140.6	140.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)