

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: P298924

Luminaire Tested: **GLNA-AF-02-LED-E1-T2-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P298924  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24139)  
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-T2-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9621.8 lumens  
Efficiency: N/A  
Efficacy: 113.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B2 - 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

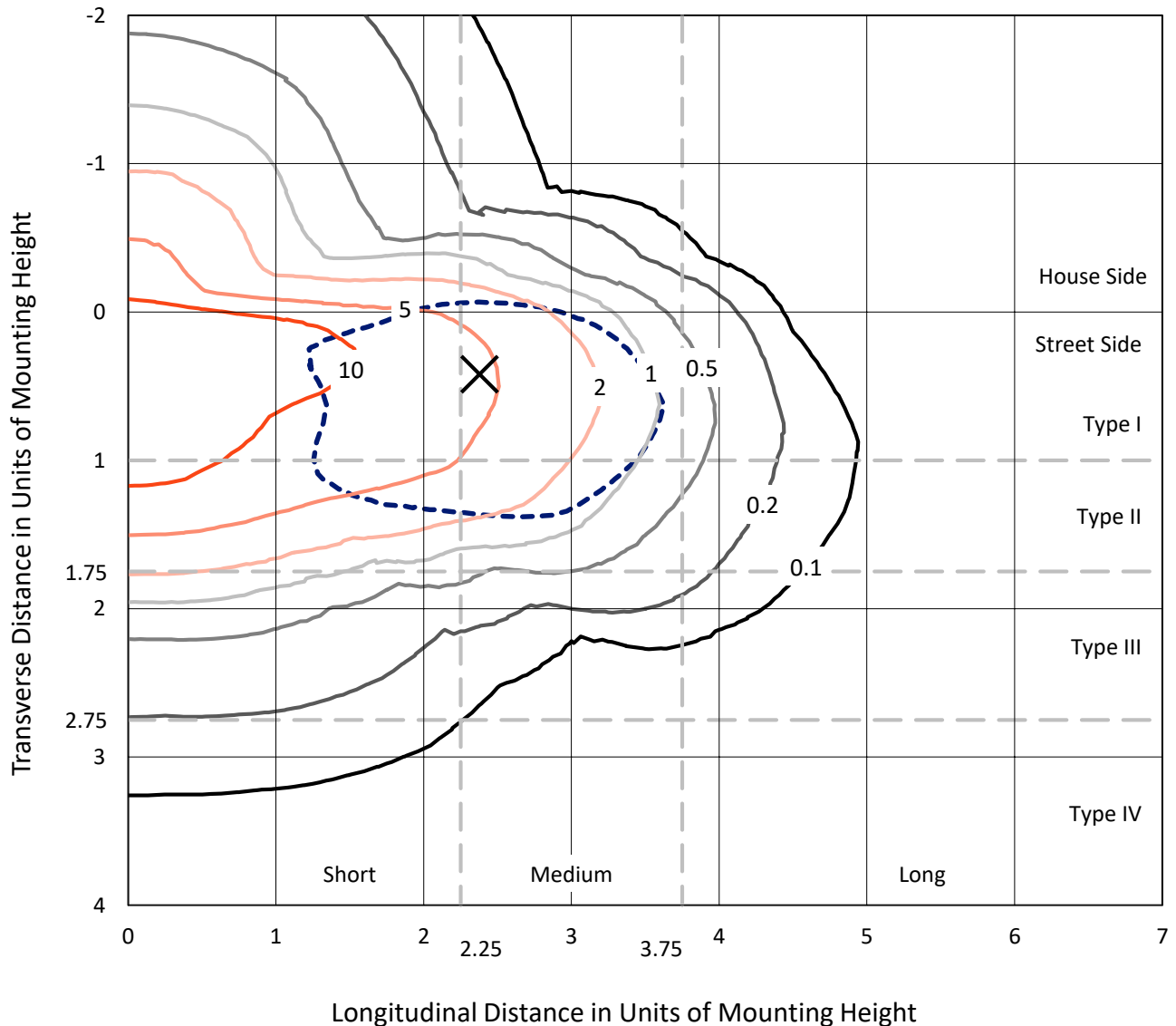


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

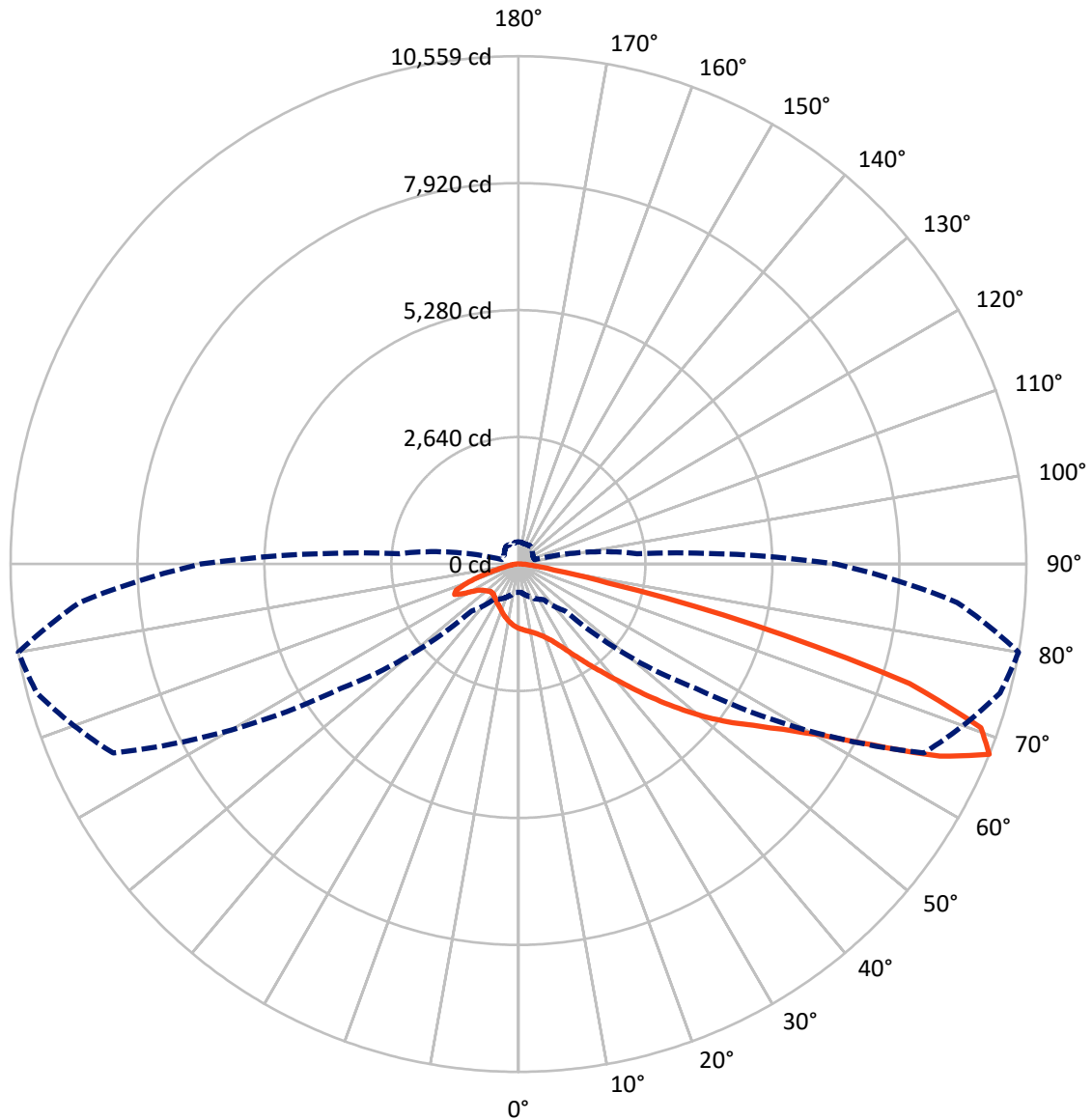


Based on 10 foot mounting height. Maximum calculated value = 16.2 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1772.0	0.0	1772.0
	% Fixture	18.4	0.0	18.4
<b>Street Side</b>	Lumens	7849.8	0.0	7849.8
	% Fixture	81.6	0.0	81.6
<b>Total</b>	Lumens	9621.8	0.0	9621.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.3	1.3
10°-20°	355.2	3.7
20°-30°	588.0	6.1
30°-40°	961.8	10.0
40°-50°	1552.8	16.1
50°-60°	2241.9	23.3
60°-70°	2474.0	25.7
70°-80°	1140.4	11.9
80°-90°	184.4	1.9
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°	9621.8	100.0
0°-180°	9621.8	100.0



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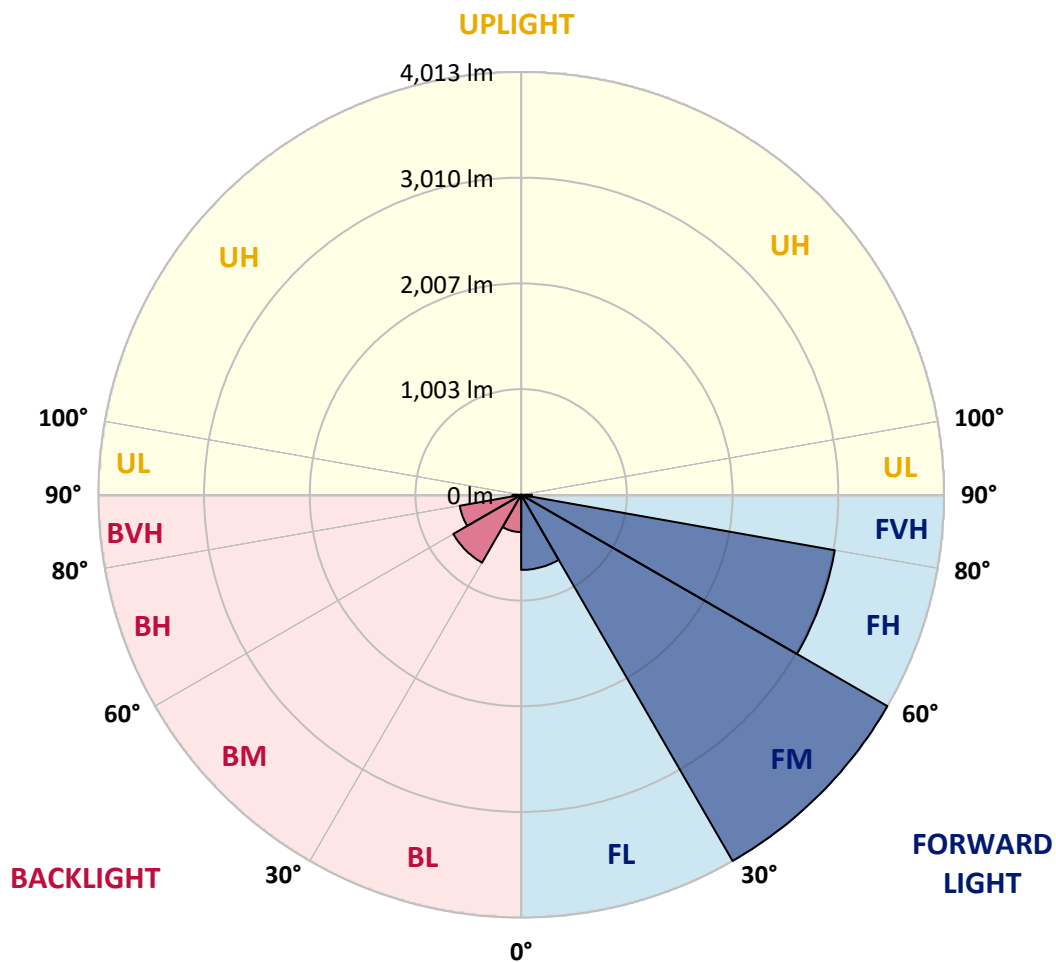
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	713.0	7.4			
FM (30°-60°)	4013.0	41.7			
FH (60°-80°)	3022.5	31.4			G2/5000
FVH (80°-90°)	101.4	1.1			G2/225
BL (0°-30°)	353.5	3.7	B1/500		
BM (30°-60°)	743.5	7.7	B1/1000		
BH (60°-80°)	591.9	6.2	B2/1000		G2/1000
BVH (80°-90°)	83.0	0.9			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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	1336.7	1336.7	1336.7	1336.7	1336.7	1336.7	1336.7	1336.7	1336.7	1336.7	1336.7
2.5°	1462.3	1453.7	1455.2	1452.8	1445.7	1433.4	1420.1	1396.0	1370.9	1357.6	1347.2
5°	1584.5	1582.1	1578.8	1571.2	1553.2	1527.6	1495.9	1453.3	1407.3	1383.2	1360.0
7.5°	1675.9	1674.5	1670.2	1665.5	1648.0	1617.2	1569.3	1508.7	1441.9	1408.7	1372.7
10°	1683.5	1685.9	1689.2	1702.0	1704.3	1687.7	1639.0	1565.5	1477.9	1435.3	1389.3
12.5°	1619.1	1624.3	1637.1	1669.7	1704.3	1724.7	1699.6	1625.2	1520.1	1468.4	1410.2
15°	1533.8	1536.6	1552.3	1597.3	1659.3	1722.3	1746.0	1691.1	1574.5	1511.1	1441.4
17.5°	1497.3	1498.7	1509.6	1539.5	1597.3	1687.3	1772.1	1762.6	1641.3	1564.1	1479.8
20°	1478.9	1482.2	1497.8	1527.2	1563.6	1642.3	1775.9	1839.8	1720.9	1630.4	1528.1
22.5°	1531.4	1530.0	1535.7	1550.4	1581.2	1628.5	1773.0	1919.4	1822.3	1715.7	1591.1
25°	1654.1	1659.3	1649.4	1632.8	1642.7	1675.9	1788.2	2005.6	1949.2	1825.1	1673.5
27.5°	1828.9	1823.7	1809.0	1770.2	1749.8	1764.0	1838.4	2098.4	2107.0	1969.1	1782.5
30°	2003.2	1999.0	1984.8	1937.4	1895.7	1883.9	1936.0	2205.0	2295.0	2142.0	1916.1
32.5°	2184.2	2179.4	2166.2	2118.8	2068.6	2041.1	2074.8	2328.2	2516.7	2348.5	2073.3
35°	2407.3	2398.3	2370.3	2304.5	2255.2	2233.9	2249.5	2483.1	2772.5	2593.0	2264.2
37.5°	2617.1	2630.9	2602.4	2511.5	2447.5	2440.0	2457.5	2672.1	3048.2	2866.3	2483.5
40°	2827.9	2830.3	2804.7	2730.3	2664.5	2652.2	2696.2	2901.3	3373.6	3193.1	2750.2
42.5°	3045.8	3050.5	3007.4	2938.8	2890.4	2892.8	2943.0	3169.9	3746.9	3578.2	3057.2
45°	3304.0	3311.1	3263.7	3173.7	3129.7	3218.2	3197.4	3471.2	4156.1	4015.9	3409.6
47.5°	3574.0	3584.9	3548.9	3464.6	3409.6	3531.3	3451.8	3805.1	4596.7	4485.3	3796.6
50°	3721.3	3736.9	3772.0	3765.8	3754.0	3733.6	3735.5	4163.2	5050.9	4974.2	4194.5
52.5°	3642.2	3641.7	3769.6	3925.0	4090.8	4103.1	4081.3	4540.8	5475.4	5452.1	4569.2
55°	3280.3	3304.9	3498.7	3799.4	4252.3	4535.1	4599.5	4973.2	5892.2	5919.2	4949.6
57.5°	2677.8	2698.1	2959.6	3378.8	4034.4	4791.8	5336.6	5601.8	6358.3	6484.3	5455.9
60°	1816.1	1840.8	2117.9	2621.4	3448.0	4648.8	6038.1	6723.5	6916.3	7202.9	6166.5
62.5°	1067.2	1089.5	1315.4	1653.6	2427.6	3984.2	6346.0	8319.4	7802.6	8287.2	7250.3
65°	734.7	749.8	859.7	1029.3	1395.0	2683.4	5964.2	9421.2	9166.3	9630.5	8507.0
67.5°	591.2	589.3	676.4	792.0	898.1	1383.6	4510.0	9296.6	10365.7	10559.4	9159.2
70°	487.0	485.1	544.3	640.0	717.6	779.2	2456.5	7845.2	10121.3	10199.9	8558.6
72.5°	407.4	409.3	447.2	518.2	588.8	586.9	1079.5	5518.9	7962.2	8506.0	6822.5
75°	343.9	344.8	370.0	420.2	478.0	472.7	585.5	2989.9	4628.4	5006.9	3781.9
77.5°	292.7	293.7	309.8	337.7	379.0	377.1	427.3	1291.7	1930.8	1907.1	1293.6
80°	261.0	261.0	268.6	273.8	296.5	288.0	316.9	620.5	816.2	753.6	516.3
82.5°	204.6	205.6	252.0	250.1	233.5	222.6	222.6	365.7	432.5	399.8	302.2
85°	115.1	114.6	162.5	196.1	205.6	156.8	155.4	204.6	235.4	207.5	146.4
87.5°	49.3	50.2	75.3	87.2	116.5	97.6	96.2	105.6	119.8	103.7	67.7
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°	1336.7	1336.7	1336.7	1336.7	1336.7	1336.7	1336.7	1336.7	1336.7	1336.7	1336.7
2.5°	1337.2	1324.9	1297.9	1264.3	1234.0	1214.1	1196.1	1170.0	1171.4	1153.4	1140.2
5°	1336.3	1310.7	1248.2	1173.8	1102.3	1050.6	1011.8	976.7	968.2	951.6	941.7
7.5°	1337.2	1295.5	1190.4	1071.5	982.9	917.5	884.4	865.9	861.6	856.0	856.4
10°	1340.5	1281.8	1126.9	975.8	883.0	839.8	831.8	837.5	844.1	846.0	846.5
12.5°	1348.1	1269.5	1057.3	890.5	820.4	807.2	820.9	840.3	853.1	859.3	858.8
15°	1365.2	1260.0	990.5	823.7	785.8	793.0	818.5	846.0	864.5	873.0	873.5
17.5°	1383.6	1246.3	921.8	772.6	760.3	778.3	810.0	842.2	865.0	874.4	876.3
20°	1407.8	1229.2	849.8	734.2	736.1	756.5	786.3	818.5	843.6	851.7	855.5
22.5°	1439.5	1210.7	786.8	703.0	708.6	724.3	747.5	775.4	797.2	801.0	804.3
25°	1482.2	1190.9	736.6	674.5	676.9	685.9	701.5	718.1	733.3	729.0	732.3
27.5°	1539.5	1173.8	699.2	648.5	644.2	646.1	654.2	659.4	667.4	655.6	657.0
30°	1606.7	1155.3	670.3	625.7	613.9	610.6	612.5	615.3	621.5	605.4	603.0
32.5°	1684.9	1133.1	643.3	605.8	589.3	582.6	583.6	591.2	614.8	604.9	599.7
35°	1775.9	1108.0	614.8	584.1	572.7	563.2	562.3	586.0	656.5	650.4	645.6
37.5°	1882.4	1082.9	586.4	559.4	560.4	550.0	546.6	573.6	664.6	640.4	637.1
40°	2017.9	1069.6	562.3	533.4	545.2	543.8	537.2	550.9	611.5	567.5	561.8
42.5°	2185.6	1071.5	544.3	505.4	527.2	542.4	532.0	532.4	554.2	521.1	515.8
45°	2392.6	1093.7	531.5	483.2	506.8	541.0	530.1	522.5	524.4	506.8	504.0
47.5°	2634.2	1139.7	522.5	464.7	487.4	535.7	529.6	519.6	515.4	505.9	503.5
50°	2902.8	1206.5	515.8	447.2	469.9	527.2	530.1	516.8	512.1	508.3	506.8
52.5°	3166.6	1282.7	505.9	432.0	456.2	516.8	531.5	514.0	508.7	505.9	504.5
55°	3460.8	1378.0	490.7	419.2	444.8	503.5	531.5	509.7	504.0	504.5	504.0
57.5°	3858.2	1531.9	472.7	408.3	431.1	487.4	522.5	505.0	497.8	498.3	498.8
60°	4479.2	1803.3	451.0	397.4	414.0	468.5	510.2	494.5	487.4	489.3	489.8
62.5°	5392.5	2201.7	422.5	381.3	396.0	448.1	493.1	481.3	474.2	478.9	478.9
65°	6341.7	2553.2	387.5	361.0	377.1	425.8	471.8	464.7	457.6	468.5	468.0
67.5°	6597.0	2474.5	352.4	338.7	358.1	401.2	446.2	442.4	438.6	457.6	456.6
70°	5860.5	1986.6	320.2	315.9	337.3	374.7	418.7	418.7	416.4	430.6	427.3
72.5°	4465.0	1408.7	289.4	291.8	313.6	345.8	388.9	392.2	388.4	395.5	392.7
75°	2390.2	806.2	258.6	265.3	284.2	316.4	355.7	359.1	356.7	356.2	357.6
77.5°	794.4	394.1	226.4	236.8	253.4	286.1	321.2	326.4	320.7	319.7	319.3
80°	353.8	247.7	190.9	204.6	219.3	251.5	284.7	288.9	282.8	291.3	280.4
82.5°	227.4	162.9	153.0	168.2	182.4	216.9	248.2	249.2	243.5	282.8	241.1
85°	110.4	100.9	115.1	128.8	141.2	170.5	205.6	206.1	191.8	174.8	168.6
87.5°	54.9	58.7	76.7	89.1	95.2	117.0	149.7	146.8	140.7	127.9	117.9
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)