

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: P301083

Luminaire Tested: **GLNA-AF-01-LED-E1-T3R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301083  
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-01-LED-E1-T3R  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
Roadway OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6349.8 lumens  
Efficiency: N/A  
Efficacy: 107.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 59  
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

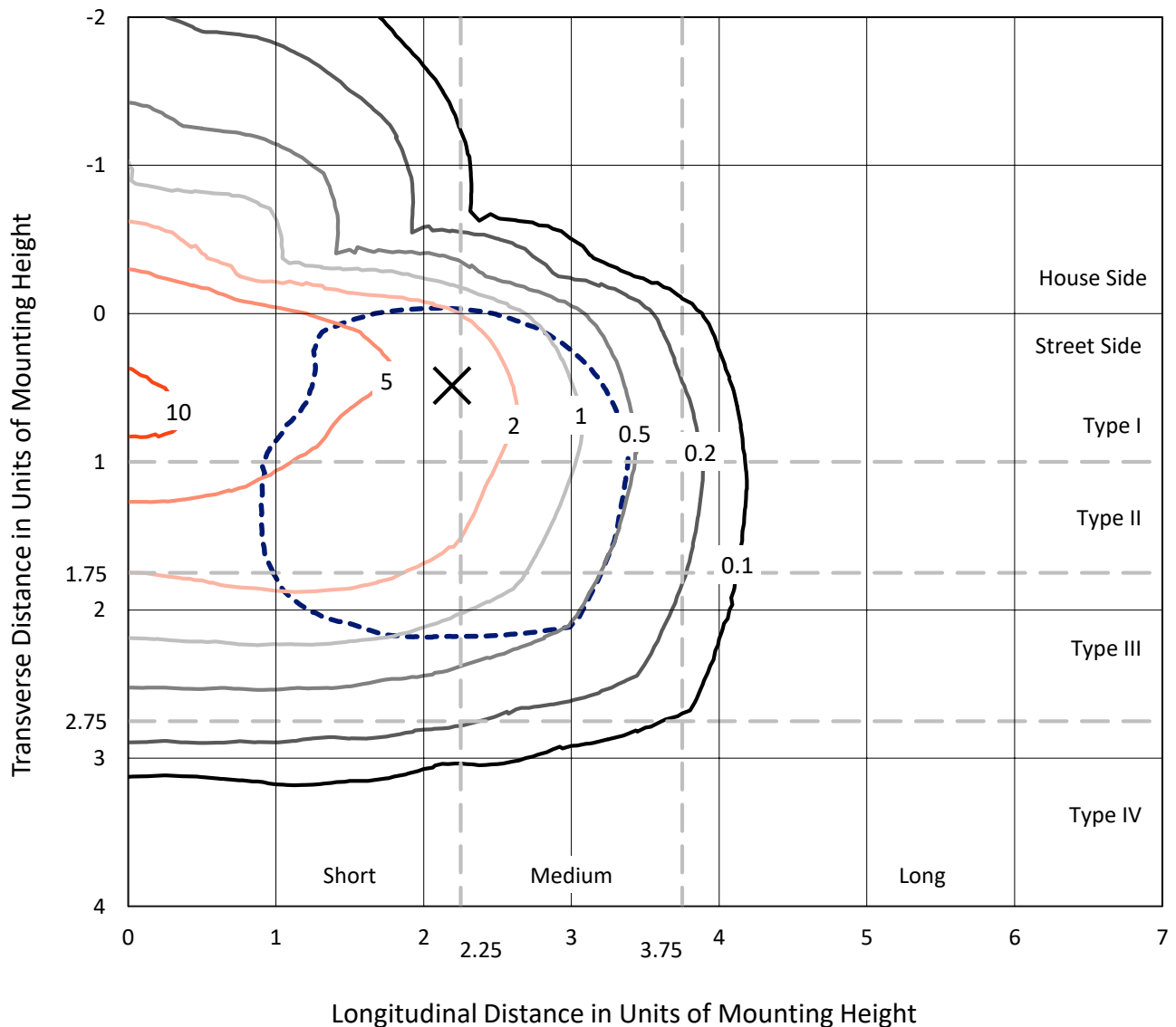


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

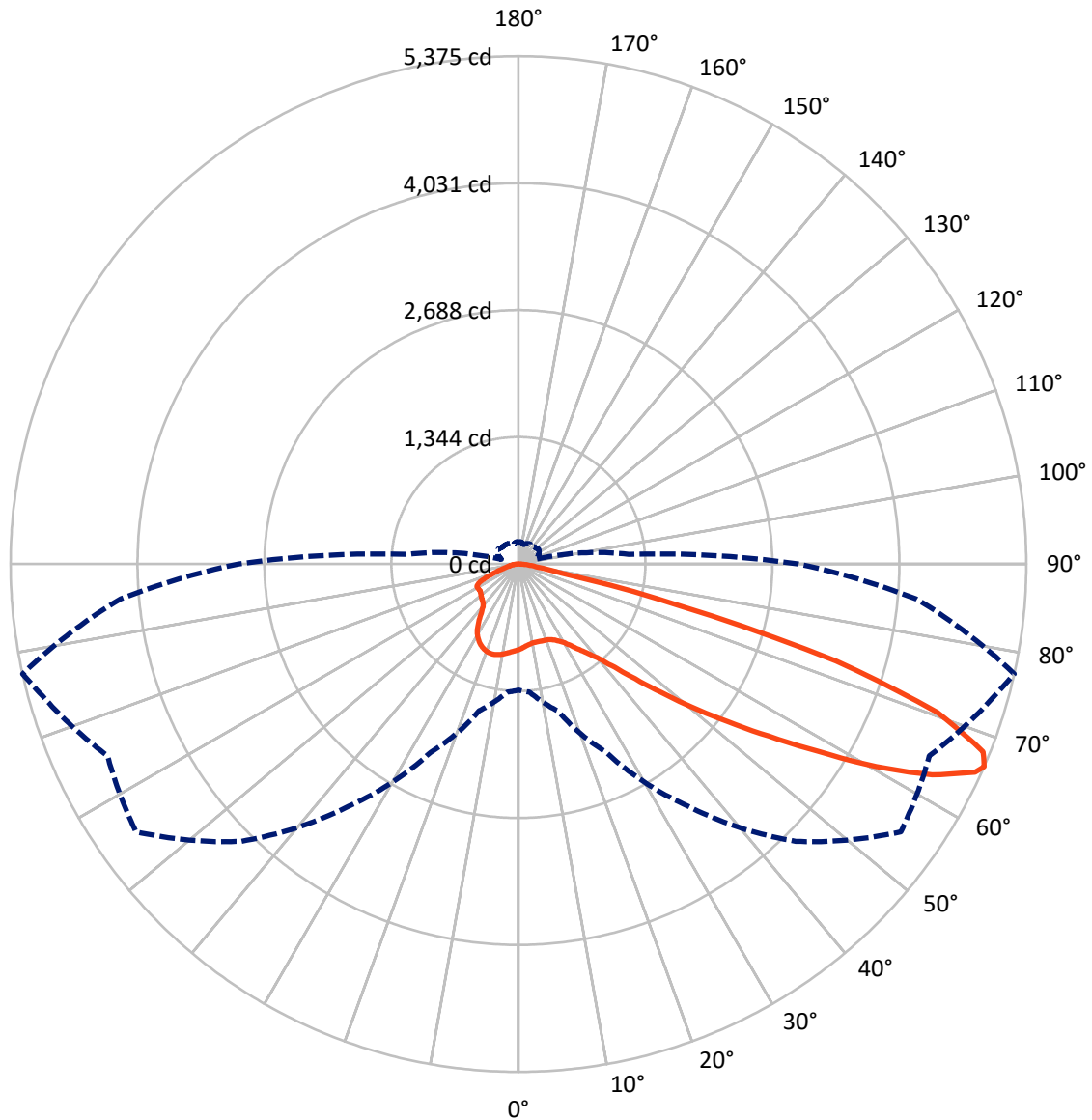


Based on 10 foot mounting height. Maximum calculated value = 11.2 fc  
 Type III - Short - Full Cutoff

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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
<b>House Side</b>	Lumens	1084.8	0.0	1084.8
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	5265.0	0.0	5265.0
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	6349.8	0.0	6349.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.8	1.3
10°-20°	228.1	3.6
20°-30°	389.2	6.1
30°-40°	623.1	9.8
40°-50°	962.6	15.2
50°-60°	1365.4	21.5
60°-70°	1826.5	28.8
70°-80°	793.2	12.5
80°-90°	80.9	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°	6349.8	100.0
0°-180°	6349.8	100.0



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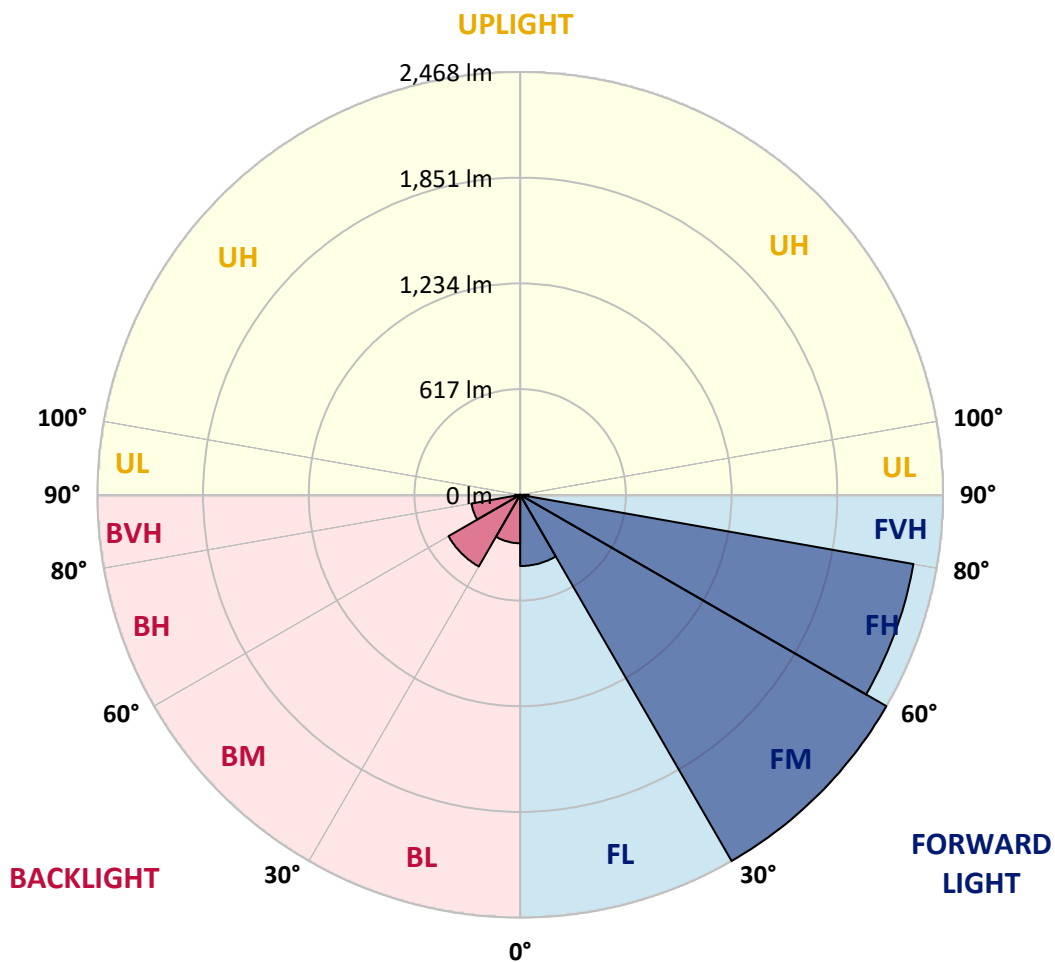
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	415.6	6.5			
FM	(30°-60°)	2467.9	38.9			
FH	(60°-80°)	2330.8	36.7			G2/5000
FVH	(80°-90°)	50.7	0.8			G1/100
BL	(0°-30°)	282.5	4.4	B1/500		
BM	(30°-60°)	483.2	7.6	B1/1000		
BH	(60°-80°)	288.9	4.5	B1/500		G1/500
BVH	(80°-90°)	30.2	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°	904.9	904.9	904.9	904.9	904.9	904.9	904.9	904.9	904.9	904.9	904.9
2.5°	800.5	805.9	810.4	814.6	822.9	836.7	852.6	865.5	884.2	887.8	897.7
5°	727.0	727.0	730.5	736.9	748.3	769.0	790.6	819.4	859.9	869.4	895.9
7.5°	691.3	691.6	693.7	699.0	708.9	727.8	751.5	785.5	840.4	856.3	901.2
10°	704.5	701.5	696.9	694.3	695.8	706.8	729.4	767.2	828.4	848.7	913.3
12.5°	778.2	772.6	757.0	736.3	716.5	708.4	721.6	758.4	823.3	847.0	929.2
15°	898.9	896.5	867.4	824.5	776.5	736.3	727.3	755.2	823.8	849.1	948.1
17.5°	1050.1	1046.8	1008.4	946.0	867.7	789.4	747.4	757.9	825.9	852.6	966.4
20°	1202.8	1192.6	1151.2	1076.8	976.3	861.6	780.7	764.8	828.7	856.5	985.6
22.5°	1316.8	1308.4	1271.2	1198.9	1083.1	945.4	825.4	776.8	837.4	868.0	1009.3
25°	1417.0	1417.6	1380.7	1310.8	1191.1	1034.2	883.0	808.9	859.5	891.3	1041.7
27.5°	1540.9	1533.8	1499.3	1429.9	1297.9	1123.9	952.6	853.0	892.6	924.7	1084.3
30°	1689.1	1684.0	1644.1	1565.6	1416.4	1220.2	1032.1	904.2	935.2	968.5	1140.1
32.5°	1863.4	1861.1	1819.7	1718.5	1553.2	1333.6	1125.4	972.1	998.8	1033.3	1220.2
35°	2068.1	2068.4	2019.5	1898.0	1702.9	1465.6	1231.3	1059.4	1076.2	1112.2	1315.7
37.5°	2194.1	2209.4	2191.1	2067.2	1872.4	1613.3	1368.7	1175.2	1164.4	1200.7	1418.0
40°	2221.1	2239.7	2297.6	2234.6	2062.1	1775.9	1490.5	1286.5	1273.1	1317.4	1549.7
42.5°	2183.3	2209.1	2331.5	2375.9	2263.4	1976.3	1654.3	1451.8	1434.8	1494.4	1713.5
45°	2160.8	2180.0	2321.6	2449.5	2438.0	2202.8	1862.9	1659.4	1653.1	1731.4	1902.5
47.5°	2121.8	2139.2	2275.4	2466.5	2540.7	2410.4	2113.4	1913.3	1925.6	2028.2	2115.8
50°	2142.8	2150.0	2223.8	2423.0	2570.4	2562.6	2393.3	2207.3	2249.3	2377.4	2357.3
52.5°	2139.8	2158.4	2217.8	2351.6	2574.3	2656.5	2669.0	2535.2	2623.8	2770.8	2625.2
55°	1730.0	1764.1	2147.3	2333.6	2588.0	2748.5	2914.5	2880.9	3045.8	3217.2	2927.7
57.5°	1652.0	1673.6	1886.0	2371.4	2661.2	2924.4	3187.5	3261.3	3537.3	3736.2	3296.1
60°	1636.6	1663.3	1883.2	2417.7	2809.7	3210.9	3592.2	3721.9	4135.3	4353.1	3723.3
62.5°	1588.9	1617.7	1865.5	2411.6	3020.7	3607.2	4110.4	4211.5	4702.3	4914.2	4080.7
65°	1437.8	1464.7	1721.3	2314.7	3162.9	4030.3	4723.6	4660.4	5150.0	5309.3	4258.8
66°	1334.2	1360.6	1607.5	2200.7	3129.9	4150.3	4940.9	4799.3	5250.2	5375.0	4224.1
67.5°	1144.9	1165.6	1386.7	1945.4	2954.4	4183.9	5123.6	4903.6	5260.6	5304.8	4025.2
70°	723.4	729.4	901.2	1342.9	2236.4	3628.5	4845.4	4644.5	4826.9	4707.4	3374.4
72.5°	313.9	311.8	432.7	683.1	1266.2	2434.7	3919.6	3832.3	3786.4	3513.9	2362.2
75°	174.6	177.1	224.7	317.1	514.5	1195.9	2564.0	2453.6	2071.6	1767.8	1071.1
77.5°	140.1	143.4	186.3	225.0	231.0	417.1	1199.8	976.3	587.7	471.7	297.6
80°	110.7	116.7	162.6	175.2	155.7	171.9	387.6	310.0	232.6	213.3	154.2
82.5°	87.6	91.8	139.5	132.6	108.9	115.8	185.7	181.0	151.3	137.7	89.1
85°	63.0	70.8	114.6	99.9	71.4	78.0	123.3	118.2	86.7	70.8	39.3
87.5°	25.8	33.6	81.0	66.3	39.9	36.3	61.5	57.9	41.1	30.0	19.5
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°	904.9	904.9	904.9	904.9	904.9	904.9	904.9	904.9	904.9	904.9	904.9
2.5°	904.0	911.1	920.5	926.2	929.2	931.3	934.6	934.3	935.2	935.5	936.7
5°	910.0	922.0	935.5	939.1	939.1	935.8	932.5	927.0	925.0	924.4	925.0
7.5°	925.6	938.8	950.5	946.3	937.3	924.0	907.0	892.0	883.9	881.2	880.6
10°	945.4	961.3	966.1	950.2	923.8	892.0	858.1	833.5	819.4	815.5	814.3
12.5°	969.4	984.4	977.8	944.2	895.2	844.0	797.1	757.9	728.5	719.2	718.6
15°	995.8	1007.5	984.4	925.6	852.6	777.1	693.7	625.9	589.3	577.6	576.7
17.5°	1020.4	1026.4	980.5	893.2	790.0	667.6	556.9	504.6	492.1	495.1	495.6
20°	1041.4	1041.4	967.3	846.6	691.3	523.2	453.3	452.5	461.5	470.5	472.3
22.5°	1064.5	1050.7	944.2	781.0	551.4	428.1	418.0	426.3	436.5	446.4	447.9
25°	1093.0	1058.2	912.1	681.4	433.5	388.8	392.7	399.6	404.7	411.1	412.0
27.5°	1124.8	1067.8	869.8	544.2	376.3	364.3	367.3	369.6	369.0	371.5	372.0
30°	1162.9	1078.9	811.9	425.4	352.6	343.2	337.8	335.8	335.8	339.7	341.1
32.5°	1213.9	1095.4	728.7	364.5	341.1	328.2	310.9	303.0	306.0	319.2	322.2
35°	1270.1	1113.1	616.3	343.8	338.7	321.3	294.3	279.9	280.2	292.5	296.4
37.5°	1331.2	1135.6	492.9	339.9	344.1	321.7	285.6	265.8	257.7	257.7	259.3
40°	1409.5	1158.7	399.1	342.7	355.6	325.2	281.2	254.7	231.9	232.6	233.7
42.5°	1511.5	1178.5	348.7	348.3	369.4	330.0	280.8	240.0	220.2	233.7	246.0
45°	1625.0	1188.4	326.4	353.5	380.4	333.0	276.1	237.6	221.7	261.9	285.3
47.5°	1755.4	1182.7	314.1	355.2	383.2	333.0	270.6	243.4	232.2	303.3	330.7
50°	1898.6	1166.2	302.1	351.6	382.3	332.4	275.7	249.0	236.1	310.5	329.4
52.5°	2066.9	1152.4	289.5	343.8	375.9	329.1	281.7	246.6	223.8	282.3	295.5
55°	2258.9	1156.3	275.4	332.8	366.0	322.9	279.6	237.0	210.9	248.7	256.8
57.5°	2504.3	1202.8	258.6	318.7	352.6	312.3	272.2	232.6	207.0	225.7	230.5
60°	2778.2	1283.8	237.6	304.5	335.8	295.5	266.4	234.6	208.8	223.8	226.2
62.5°	2979.2	1330.9	219.7	283.8	313.0	276.9	259.3	237.3	213.7	230.1	229.6
65°	3033.8	1253.5	197.1	253.5	282.1	257.4	250.2	240.3	215.7	235.2	232.6
66°	2957.4	1170.1	187.2	239.5	266.4	247.8	245.7	240.0	214.8	235.8	231.3
67.5°	2771.7	999.1	170.1	218.7	241.5	233.5	238.6	237.3	212.4	235.2	228.9
70°	2260.4	681.7	145.5	182.1	201.0	205.5	224.7	227.7	204.6	224.7	210.9
72.5°	1579.4	415.2	128.7	141.3	162.6	175.2	205.8	214.5	194.1	196.2	183.0
75°	763.3	220.6	116.7	109.6	126.3	146.4	183.0	196.5	177.6	164.2	159.3
77.5°	237.9	134.7	99.0	88.2	99.0	118.2	153.0	172.2	158.2	137.4	135.6
80°	127.8	99.0	76.2	70.8	78.3	92.7	120.3	143.7	135.9	123.3	110.1
82.5°	84.3	64.2	56.4	54.9	59.7	70.8	89.4	119.1	119.1	105.6	76.9
85°	43.5	39.3	38.7	38.7	41.7	47.1	60.9	91.8	97.8	55.8	46.2
87.5°	21.6	22.5	21.0	21.9	23.4	23.1	29.1	46.2	55.2	33.9	28.2
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)