

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: P300359

Luminaire Tested: **GLNA-AF-01-LED-E1-AFL-7050-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300359  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
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-AFL-7050-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

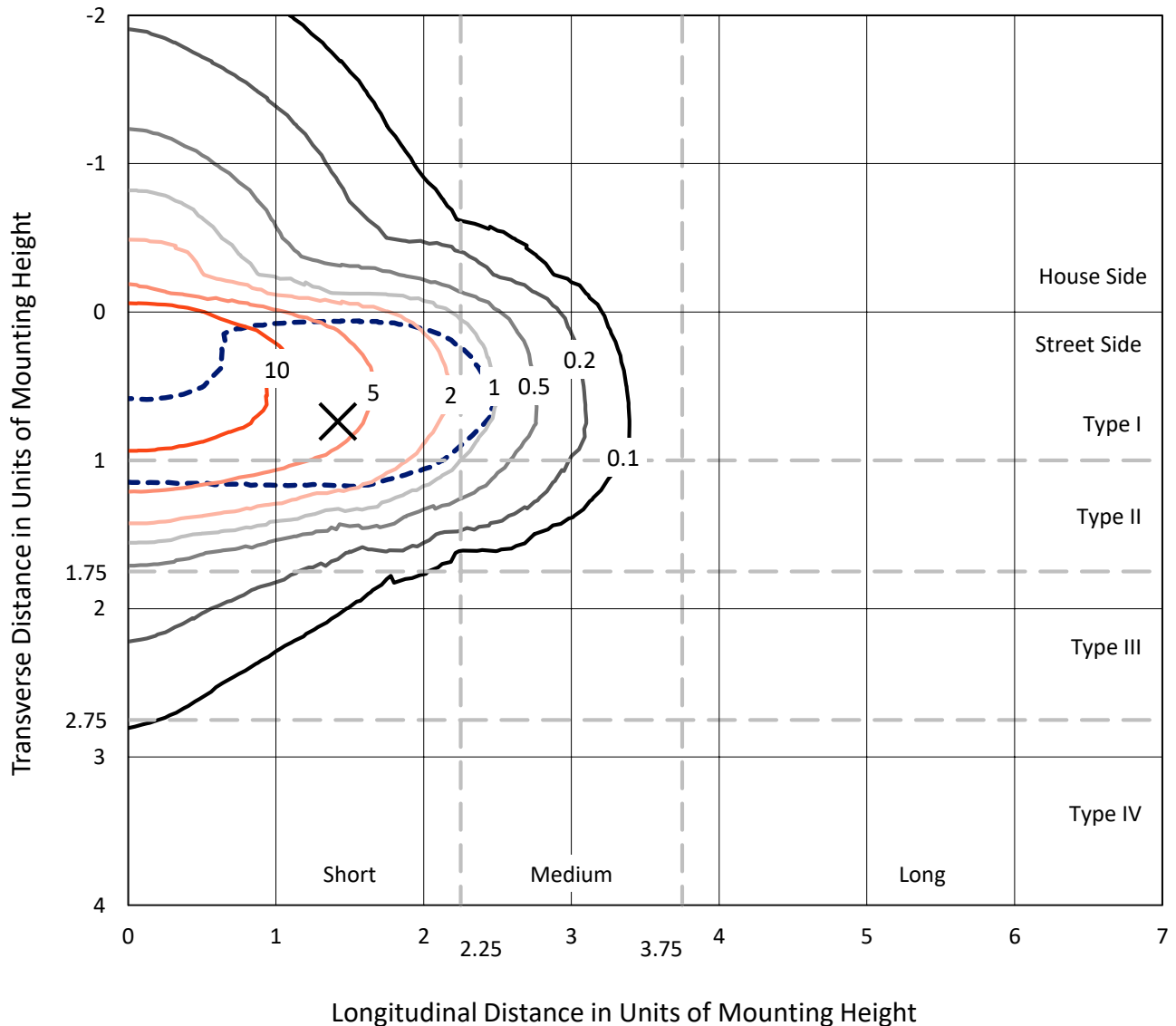
Lumens per Lamp: N/A  
Luminaire Lumens: 5147.9 lumens  
Efficiency: N/A  
Efficacy: 117.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (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

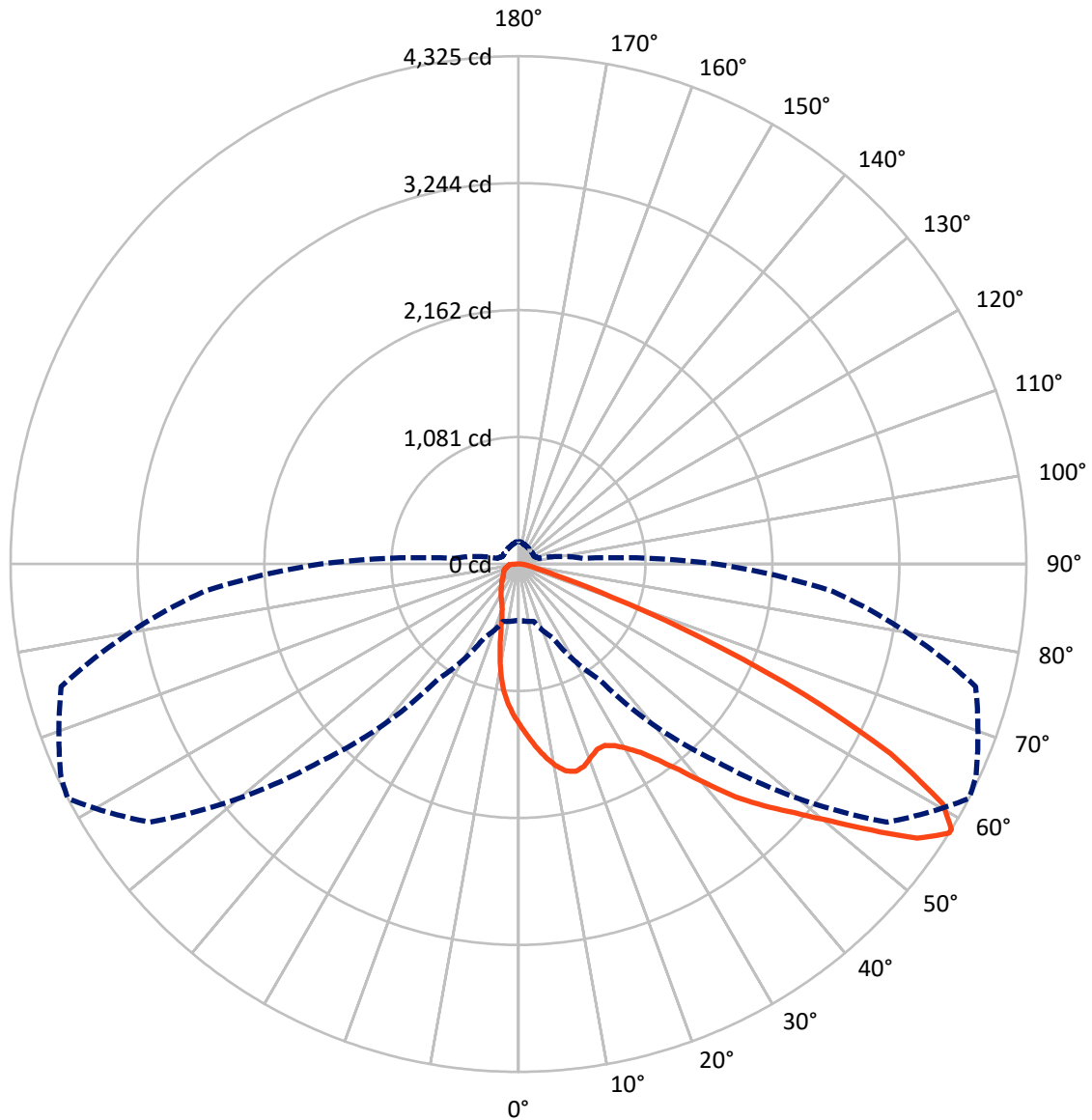
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.7 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	785.1	0.0	785.1
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	4362.8	0.0	4362.8
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	5147.9	0.0	5147.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.3	2.4
10°-20°	312.6	6.1
20°-30°	505.3	9.8
30°-40°	802.2	15.6
40°-50°	1173.8	22.8
50°-60°	1227.7	23.8
60°-70°	725.3	14.1
70°-80°	204.3	4.0
80°-90°	74.2	1.4
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°	5147.9	100.0
0°-180°	5147.9	100.0



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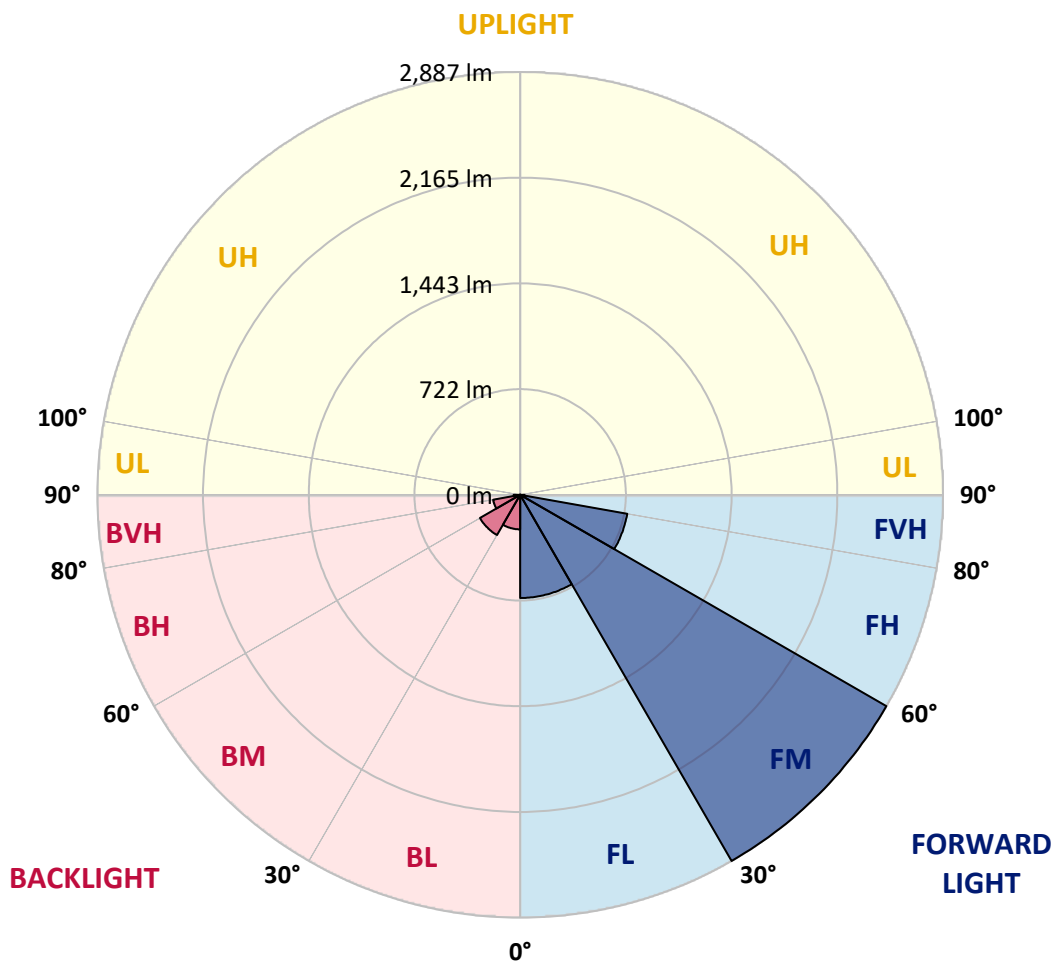
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	704.3	13.7			
FM (30°-60°)	2886.9	56.1			
FH (60°-80°)	742.3	14.4			G1/1800
FVH (80°-90°)	29.3	0.6			G1/100
BL (0°-30°)	236.0	4.6	B1/500		
BM (30°-60°)	316.9	6.2	B1/1000		
BH (60°-80°)	187.3	3.6	B1/500		G1/500
BVH (80°-90°)	44.9	0.9			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	1367.4	1367.4	1367.4	1367.4	1367.4	1367.4	1367.4	1367.4	1367.4	1367.4	1367.4
2.5°	1562.6	1550.0	1542.0	1534.9	1525.7	1506.1	1479.7	1462.9	1454.4	1425.6	1391.4
5°	1715.8	1704.6	1696.4	1686.9	1670.4	1639.6	1597.0	1563.0	1546.3	1488.6	1420.3
7.5°	1679.9	1684.5	1698.8	1723.8	1745.1	1741.0	1702.9	1659.8	1637.7	1557.5	1453.7
10°	1463.7	1471.7	1496.4	1554.8	1649.3	1746.3	1775.9	1746.1	1723.8	1625.6	1488.1
12.5°	1420.3	1420.0	1422.0	1437.5	1493.7	1630.2	1778.3	1808.4	1795.0	1690.6	1523.3
15°	1438.0	1438.5	1437.0	1443.5	1461.0	1515.1	1704.1	1832.4	1841.8	1756.0	1559.7
17.5°	1484.5	1483.3	1477.7	1477.7	1484.0	1505.1	1616.9	1810.1	1853.7	1813.9	1591.7
20°	1562.6	1557.0	1542.2	1528.6	1521.8	1533.2	1581.0	1758.7	1833.1	1864.6	1618.1
22.5°	1657.1	1652.7	1628.7	1599.7	1576.1	1575.9	1599.4	1713.8	1797.5	1912.4	1640.4
25°	1779.3	1772.2	1736.6	1690.1	1648.9	1633.1	1639.6	1711.6	1778.1	1964.2	1660.3
27.5°	1922.8	1909.9	1867.8	1800.6	1740.0	1708.3	1698.8	1751.2	1795.8	2028.5	1687.9
30°	2096.8	2082.0	2028.0	1940.5	1854.9	1802.8	1782.7	1821.2	1854.4	2106.8	1732.2
32.5°	2294.9	2273.5	2211.0	2114.5	2002.1	1922.5	1889.8	1913.8	1940.2	2201.1	1787.8
35°	2568.6	2543.1	2452.7	2319.6	2192.6	2083.3	2030.9	2048.4	2074.0	2341.7	1868.0
37.5°	2755.2	2743.8	2683.7	2558.6	2420.4	2294.6	2213.7	2223.9	2238.4	2517.4	1970.8
40°	2753.5	2758.1	2759.3	2760.5	2666.5	2546.0	2459.0	2448.3	2445.4	2710.4	2087.6
42.5°	2615.6	2634.5	2695.6	2819.5	2876.7	2821.4	2741.6	2710.9	2695.6	2937.7	2211.5
45°	2404.4	2414.6	2529.0	2771.0	2984.3	3094.1	3033.7	2936.8	2909.1	3146.7	2314.3
47.5°	2295.6	2306.8	2378.8	2642.5	2983.1	3314.4	3349.4	3164.6	3115.2	3328.5	2403.0
50°	2036.5	2059.7	2150.4	2419.0	2874.2	3415.8	3679.3	3436.1	3333.8	3505.5	2492.0
52.5°	1560.6	1596.5	1698.1	2051.5	2598.1	3365.6	3943.3	3765.3	3620.9	3688.7	2568.3
55°	984.4	1011.1	1096.4	1448.9	2078.4	3104.5	4043.4	4121.4	3992.9	3862.3	2634.5
57.5°	535.2	547.1	579.1	799.9	1351.9	2527.3	3897.4	4324.1	4270.7	4009.7	2684.4
58°	479.0	487.0	506.9	693.3	1199.0	2369.5	3832.7	4324.8	4298.1	4031.3	2688.3
60°	355.4	351.2	333.6	395.6	667.4	1637.0	3441.5	4151.7	4230.0	4057.7	2669.4
62.5°	312.2	302.3	266.2	262.0	324.6	754.1	2633.3	3556.4	3741.3	3906.9	2554.5
65°	293.3	282.6	236.1	221.1	234.2	319.0	1551.2	2667.2	2899.2	3449.7	2260.7
67.5°	279.3	265.4	217.0	196.4	197.3	210.9	621.8	1679.9	1941.0	2619.2	1758.4
70°	265.7	250.7	200.7	177.0	171.4	166.8	247.3	840.9	1077.7	1654.4	1121.1
72.5°	251.1	236.3	186.4	161.7	150.8	135.5	161.4	344.0	480.5	782.7	508.6
75°	230.0	216.7	172.1	148.1	132.6	112.2	121.9	179.6	215.5	311.7	245.1
77.5°	204.1	193.2	156.1	137.0	117.6	91.1	93.8	124.6	138.2	178.4	145.7
80°	146.7	150.5	138.9	123.1	104.7	73.9	72.0	90.9	98.2	114.7	94.8
82.5°	103.0	105.2	114.9	100.6	86.5	58.2	53.1	64.0	68.4	75.4	51.1
85°	71.0	68.6	78.8	70.1	62.5	38.8	36.4	43.4	46.1	46.8	26.4
87.5°	42.7	42.7	45.6	37.6	33.7	20.1	19.6	24.7	26.4	25.2	14.5
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°	1367.4	1367.4	1367.4	1367.4	1367.4	1367.4	1367.4	1367.4	1367.4	1367.4	1367.4
2.5°	1371.1	1353.9	1317.2	1287.9	1250.8	1212.3	1190.7	1167.7	1151.9	1140.5	1158.7
5°	1381.5	1346.3	1270.7	1199.0	1119.7	1037.3	974.7	916.5	876.1	850.9	874.6
7.5°	1398.0	1343.9	1223.4	1100.8	958.5	821.3	698.6	621.8	576.9	554.9	568.7
10°	1416.9	1340.0	1167.9	967.7	764.1	591.2	499.6	468.6	458.4	454.3	456.2
12.5°	1432.6	1331.8	1099.8	806.7	573.8	466.9	440.5	439.7	441.9	442.4	443.1
15°	1443.8	1319.7	998.7	639.0	458.9	425.4	424.0	428.3	432.5	434.2	435.1
17.5°	1451.3	1294.7	884.5	505.2	411.1	405.3	408.7	414.3	418.6	419.9	420.8
20°	1450.6	1258.1	748.6	421.3	385.2	385.2	391.0	395.4	395.6	394.2	394.9
22.5°	1443.1	1207.9	616.7	376.7	362.2	366.3	372.1	368.0	351.0	339.9	340.6
25°	1430.5	1148.0	503.7	348.3	340.8	348.1	346.4	315.4	291.1	280.2	280.2
27.5°	1419.3	1077.3	416.9	323.6	319.5	328.5	298.4	270.3	260.1	255.0	253.3
30°	1411.3	1000.9	359.0	299.9	299.4	292.8	258.9	251.1	249.4	245.3	243.9
32.5°	1413.2	923.6	321.9	279.0	280.7	250.7	240.0	241.7	240.2	235.9	233.9
35°	1429.2	850.1	297.7	260.1	255.0	226.4	228.8	232.0	231.5	225.4	223.5
37.5°	1457.8	780.6	281.7	244.3	222.5	214.3	218.2	223.0	221.8	217.7	216.2
40°	1487.9	715.1	268.6	232.0	203.4	206.0	209.4	212.1	213.3	214.5	213.6
42.5°	1517.2	646.7	252.6	219.4	195.4	198.3	199.7	202.4	209.0	213.6	213.3
45°	1534.7	582.5	236.1	201.4	189.1	190.8	189.8	195.1	203.1	210.7	210.9
47.5°	1554.1	532.6	223.0	185.0	183.0	184.2	181.3	186.7	193.9	203.1	204.1
50°	1577.6	502.8	212.6	171.9	174.8	174.8	174.0	178.9	189.1	199.7	201.7
52.5°	1604.3	496.9	203.9	162.4	166.5	166.3	167.0	174.3	185.4	195.9	197.6
55°	1636.7	512.7	194.4	155.4	158.5	159.5	161.9	170.2	179.6	191.5	192.2
57.5°	1674.6	544.7	186.9	149.8	151.3	154.4	158.3	165.8	176.0	189.1	189.8
58°	1680.9	551.5	185.7	149.3	149.8	153.4	157.8	165.1	175.3	189.6	190.3
60°	1681.1	574.0	183.0	147.1	144.2	150.3	155.1	162.4	174.0	191.3	193.0
62.5°	1621.5	573.8	181.1	144.0	138.4	145.9	151.5	160.0	172.8	195.4	198.8
65°	1427.8	521.4	171.9	139.1	133.8	142.1	148.4	158.3	176.2	213.3	215.5
67.5°	1116.8	427.4	154.7	132.4	127.7	138.2	146.4	158.1	179.9	217.4	218.9
70°	738.4	319.7	135.7	124.6	121.4	133.6	147.4	166.3	175.7	208.7	204.8
72.5°	383.2	224.5	120.5	114.9	114.2	129.4	161.4	165.3	171.6	196.4	191.5
75°	201.2	155.9	107.1	104.2	105.4	128.5	190.5	161.0	166.3	187.9	197.1
77.5°	123.1	125.8	95.8	94.5	97.0	125.6	190.3	155.4	158.5	172.8	183.0
80°	82.4	102.1	87.0	87.3	89.0	114.9	170.9	146.7	149.1	163.4	173.8
82.5°	52.1	60.4	79.0	83.1	81.0	94.8	145.2	133.6	137.0	186.9	197.6
85°	26.4	37.8	68.6	80.0	73.0	66.4	117.8	117.1	118.8	134.8	140.8
87.5°	12.1	20.8	53.6	69.8	55.0	41.5	85.6	86.8	93.6	95.8	95.8
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)