

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: P300308

Luminaire Tested: **GLNA-AF-03-LED-E1-T4FT-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300308  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)  
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-T4FT-7027  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15830 lumens  
Efficiency: N/A  
Efficacy: 95.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G3

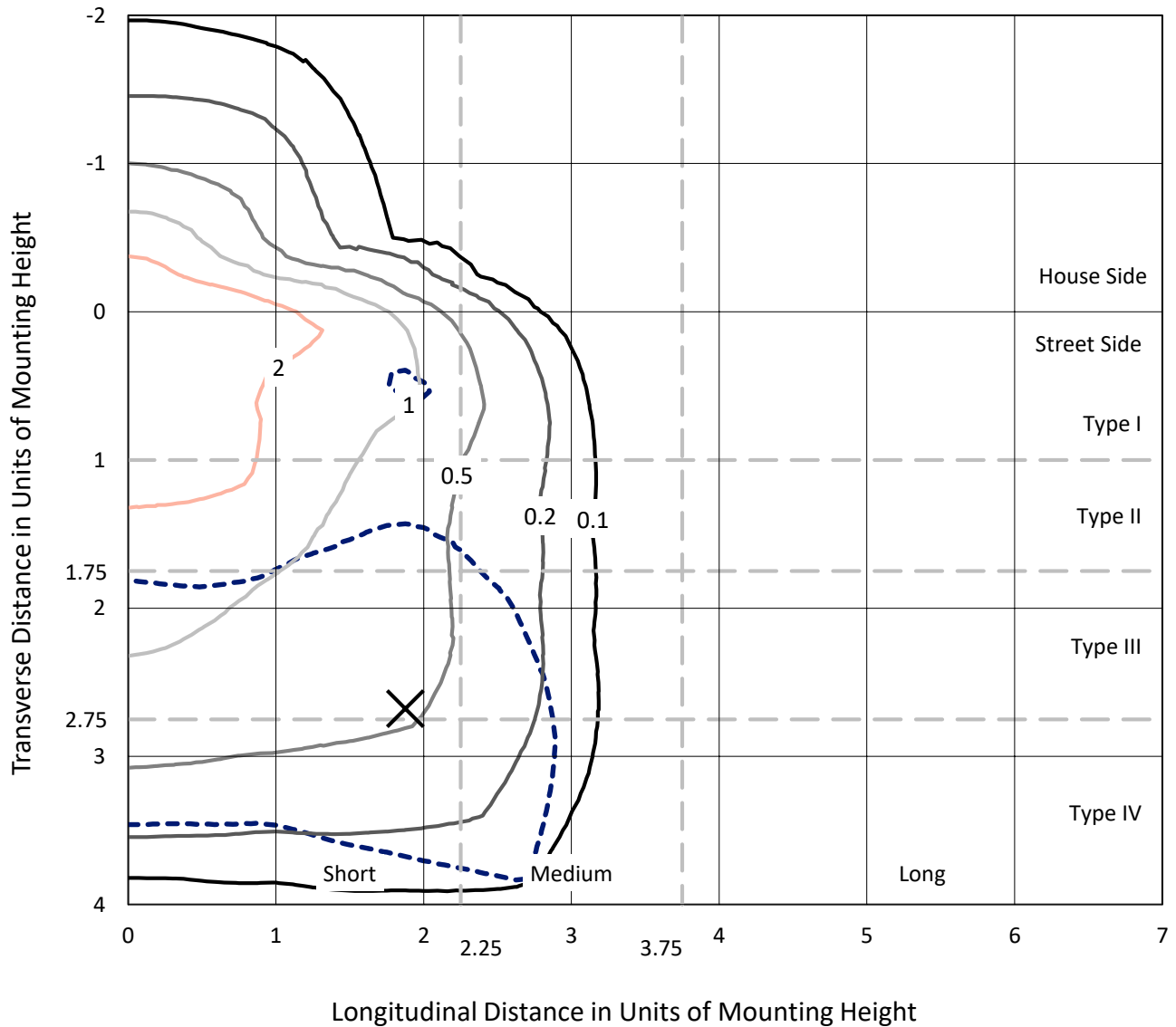
Input Watts (W): 166  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

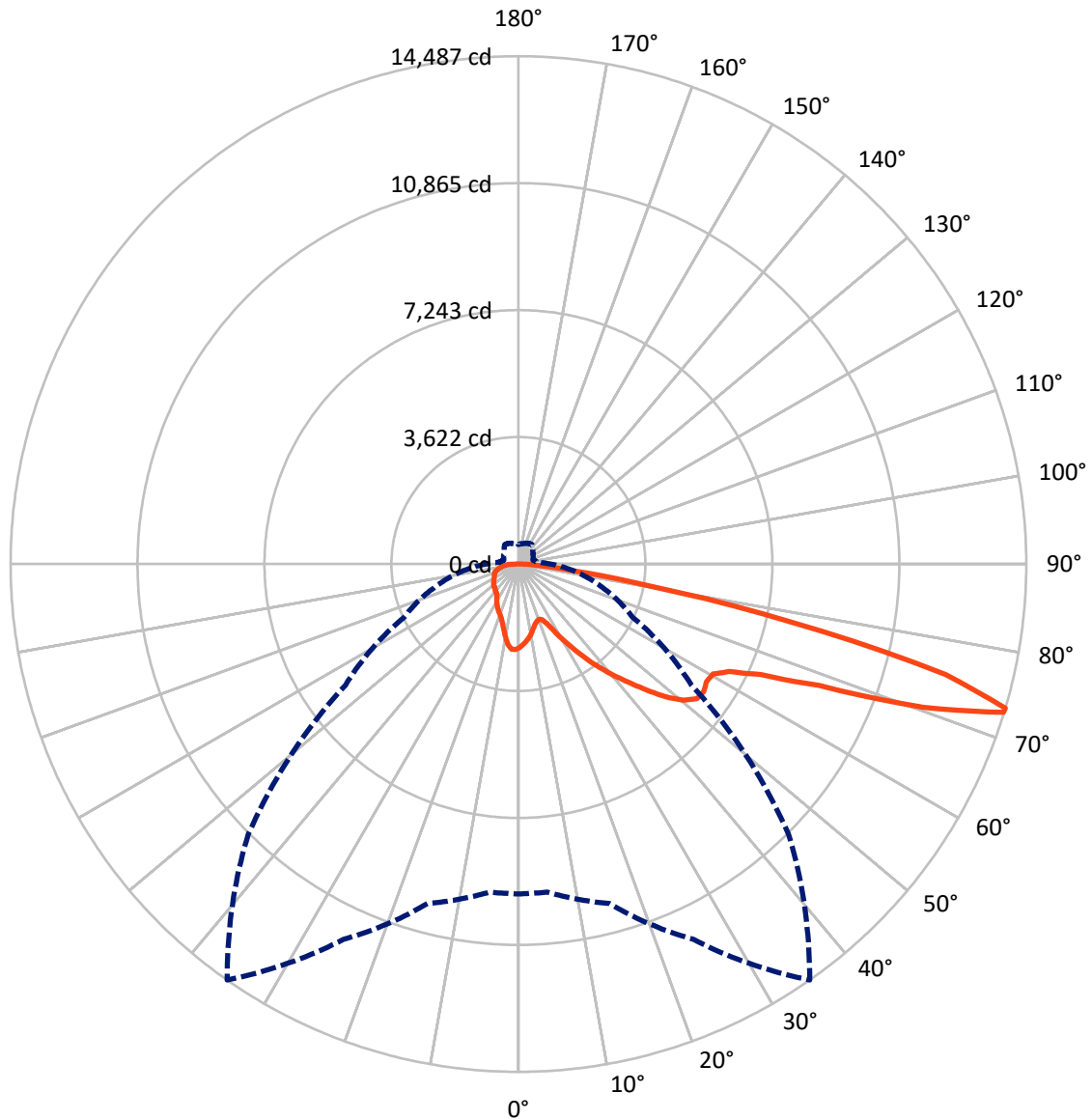
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3019.2	0.0	3019.2
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	12810.7	0.0	12810.7
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	15830.0	0.0	15830.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.3	1.4
10°-20°	539.8	3.4
20°-30°	872.7	5.5
30°-40°	1463.4	9.2
40°-50°	2255.8	14.3
50°-60°	3026.4	19.1
60°-70°	4031.8	25.5
70°-80°	3075.1	19.4
80°-90°	348.5	2.2
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°	15830.0	100.0
0°-180°	15830.0	100.0

**Coefficient of Utilization**



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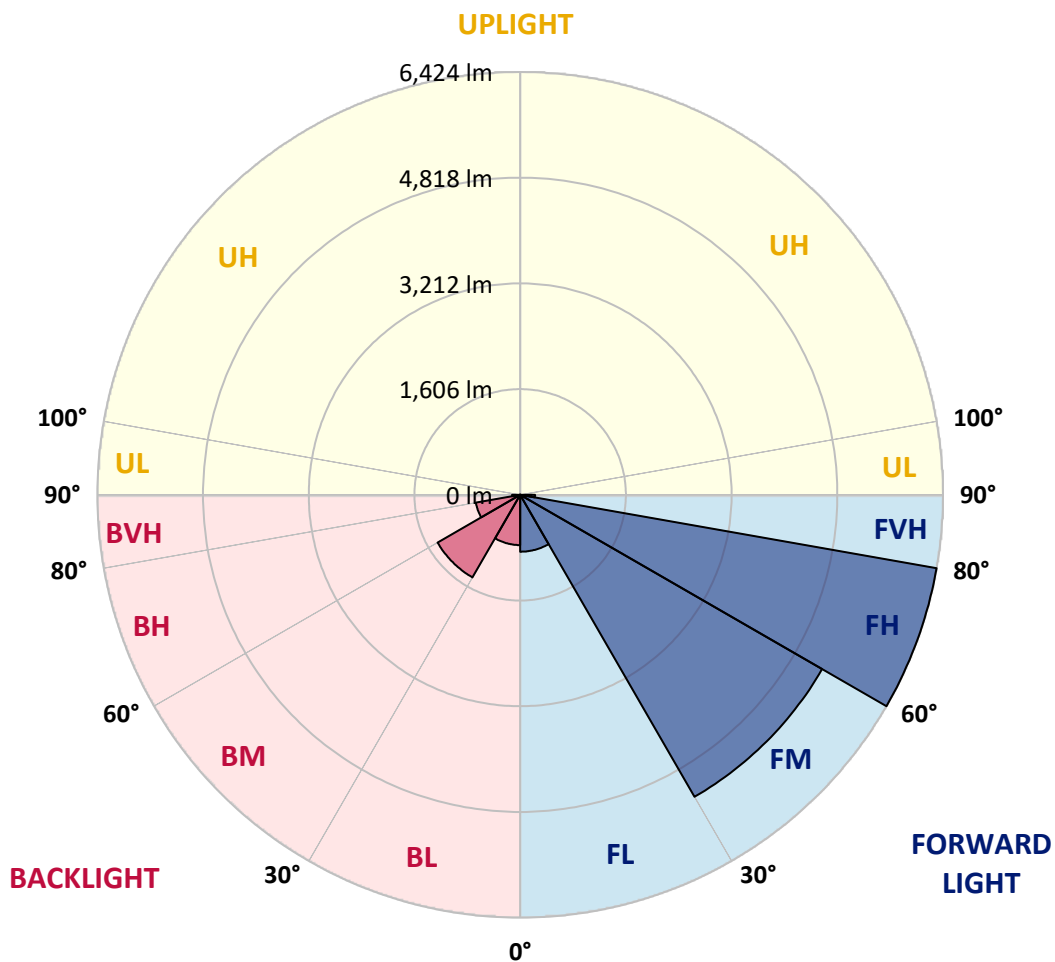
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	864.9	5.5			
FM	(30°-60°)	5296.8	33.5			
FH	(60°-80°)	6423.8	40.6			G3/7500
FVH	(80°-90°)	225.3	1.4			G3/500
BL	(0°-30°)	764.0	4.8	B2/1000		
BM	(30°-60°)	1448.9	9.2	B2/2500		
BH	(60°-80°)	683.1	4.3	B2/1000		G2/1000
BVH	(80°-90°)	123.2	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2389.2	2389.2	2389.2	2389.2	2389.2	2389.2	2389.2	2389.2	2389.2	2389.2	2389.2
2.5°	2295.0	2299.5	2294.2	2301.1	2312.5	2324.6	2333.0	2345.1	2358.8	2377.8	2382.4
5°	2187.0	2193.9	2193.9	2206.0	2228.1	2247.8	2266.1	2285.8	2314.7	2347.4	2360.3
7.5°	2068.4	2072.2	2079.1	2097.3	2129.3	2157.4	2183.2	2215.2	2254.7	2298.0	2320.8
10°	1925.5	1930.8	1941.5	1967.3	2010.7	2049.4	2086.7	2130.8	2180.9	2234.9	2263.8
12.5°	1824.4	1822.9	1827.5	1846.5	1884.5	1931.6	1985.6	2041.8	2103.4	2166.5	2201.5
15°	1790.2	1781.9	1764.4	1759.8	1780.3	1827.5	1889.8	1959.0	2032.7	2108.7	2152.1
17.5°	1811.5	1797.1	1749.2	1714.2	1711.2	1746.9	1813.0	1890.6	1975.7	2068.4	2122.4
20°	1945.3	1911.1	1793.3	1711.9	1683.8	1701.3	1759.0	1841.1	1941.5	2064.6	2133.8
22.5°	2265.3	2215.2	1965.1	1813.8	1718.8	1697.5	1740.8	1828.2	1945.3	2111.8	2199.9
25°	2731.3	2659.9	2260.0	2067.7	1871.6	1758.3	1768.2	1857.9	1999.3	2221.2	2327.7
27.5°	3099.2	3052.9	2645.4	2425.7	2149.8	1922.5	1857.1	1932.4	2109.5	2400.6	2509.3
30°	3318.2	3290.0	3057.4	2831.7	2504.8	2184.0	2027.4	2072.2	2282.0	2649.2	2738.9
32.5°	3572.1	3555.3	3441.3	3233.8	2887.9	2527.6	2297.3	2281.3	2513.1	2948.0	2989.0
35°	3835.1	3829.8	3762.9	3613.9	3299.2	2980.6	2655.3	2547.3	2764.8	3258.1	3232.3
37.5°	4079.9	4070.7	4032.0	3945.3	3729.4	3467.2	3020.2	2820.3	3036.1	3554.6	3439.8
40°	4530.6	4459.2	4326.2	4260.8	4164.2	3876.9	3309.8	3074.9	3317.4	3837.4	3619.2
42.5°	5080.3	4963.9	4716.1	4626.4	4612.7	4200.0	3507.5	3322.0	3601.0	4117.9	3795.6
45°	5512.8	5403.3	5189.7	5076.5	5126.6	4492.6	3705.9	3585.7	3892.9	4412.1	3977.2
47.5°	5974.2	5802.4	5519.6	5553.8	5663.3	4769.3	3908.1	3869.3	4212.9	4741.2	4203.0
50°	5990.9	5859.4	5735.5	5940.0	6110.3	5024.0	4161.2	4166.5	4604.4	5155.5	4503.3
52.5°	5643.5	5615.4	5812.3	6133.9	6379.4	5225.4	4449.3	4473.6	5105.3	5631.4	4833.2
55°	5521.9	5490.0	5717.3	6066.2	6415.9	5391.9	4761.7	4805.8	5711.2	6133.1	5154.8
57.5°	5818.4	5747.7	5762.9	6034.3	6326.9	5574.4	5102.3	5191.2	6369.5	6571.7	5361.5
60°	6647.0	6495.7	6208.4	6201.5	6374.8	5848.0	5496.1	5604.8	7053.7	6781.5	5280.9
62.5°	7809.3	7658.0	7119.8	6769.4	6743.5	6299.6	5979.5	6008.4	7449.0	6497.2	4789.1
65°	9067.4	8932.1	8330.8	7835.9	7597.2	7047.6	6541.3	6188.6	7319.7	5715.0	3928.6
67.5°	10594.6	10449.4	9932.5	9475.6	9246.0	8254.7	6935.8	6016.0	6499.5	4427.3	2824.1
70°	11662.6	11514.4	11310.7	11680.9	12242.6	9996.3	6986.8	5314.4	4854.5	2942.6	1699.8
72.5°	10269.2	10200.0	10571.8	12130.9	14470.7	11053.0	6315.5	3869.3	2819.5	1562.2	983.7
73°	9408.7	9393.5	10027.5	11815.4	14486.7	10890.3	6021.4	3596.4	2418.1	1382.0	899.3
75°	4248.6	4371.0	5760.6	9024.8	12586.2	8973.9	4238.0	2063.1	1366.0	954.8	678.8
77.5°	1020.9	1063.5	1802.4	4285.9	7948.4	5347.8	1920.2	1020.2	873.4	674.3	495.6
80°	434.8	449.3	694.0	1583.4	3742.3	2153.6	884.8	683.4	604.3	470.5	347.4
82.5°	241.7	256.9	393.8	718.4	1510.5	734.3	539.7	475.9	397.6	283.5	225.8
85°	136.8	145.2	230.3	401.4	640.1	294.9	323.1	316.2	224.3	146.0	111.0
87.5°	64.6	69.9	111.0	186.2	250.9	115.5	164.2	180.9	140.6	88.9	57.8
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2389.2	2389.2	2389.2	2389.2	2389.2	2389.2	2389.2	2389.2	2389.2	2389.2
2.5°	2387.7	2401.4	2417.4	2425.7	2433.3	2442.4	2451.6	2451.6	2453.1	2453.8
5°	2371.0	2399.1	2424.2	2434.8	2437.1	2437.1	2434.8	2422.7	2412.0	2416.6
7.5°	2336.0	2377.1	2398.4	2394.6	2365.7	2332.2	2304.1	2269.9	2252.4	2249.4
10°	2285.8	2333.0	2336.8	2298.8	2227.3	2155.9	2096.6	2038.8	2011.4	2004.6
12.5°	2230.4	2273.7	2249.4	2171.1	2056.3	1952.1	1876.9	1818.3	1792.5	1785.7
15°	2185.5	2215.2	2153.6	2030.4	1886.0	1775.8	1713.4	1670.1	1651.9	1646.5
17.5°	2161.9	2168.0	2055.5	1889.0	1735.5	1643.5	1604.7	1584.2	1577.4	1573.6
20°	2173.3	2130.8	1962.0	1757.5	1612.3	1547.7	1538.6	1533.3	1531.8	1529.5
22.5°	2230.4	2119.4	1876.1	1632.9	1504.4	1476.3	1483.9	1483.1	1481.6	1480.1
25°	2332.2	2129.3	1792.5	1514.3	1413.9	1407.8	1421.5	1421.5	1415.4	1415.4
27.5°	2466.8	2149.8	1699.0	1401.8	1331.8	1332.6	1343.2	1340.2	1333.3	1328.8
30°	2631.0	2162.7	1589.5	1300.7	1255.1	1252.0	1255.1	1242.1	1221.6	1220.1
32.5°	2799.0	2146.7	1462.6	1211.0	1173.7	1166.9	1164.6	1146.3	1122.8	1115.9
35°	2951.0	2088.2	1333.3	1139.5	1096.2	1081.0	1091.6	1085.5	1064.2	1058.9
37.5°	3062.0	1979.5	1217.0	1076.4	1040.7	1036.9	1043.7	1046.0	1020.9	1015.6
40°	3136.5	1832.0	1117.5	1023.2	1030.0	1015.6	992.8	976.8	969.2	966.9
42.5°	3196.5	1678.5	1033.8	998.1	1032.3	990.5	941.1	915.3	928.9	935.0
45°	3265.7	1528.7	963.9	966.9	1020.9	961.6	905.4	880.3	885.6	887.1
47.5°	3360.7	1346.3	888.6	916.8	982.9	941.9	883.3	847.6	822.5	811.1
50°	3492.2	1130.4	810.3	860.5	945.7	927.4	849.1	811.1	764.7	754.1
52.5°	3583.5	928.9	745.7	813.4	912.2	898.5	821.7	772.3	723.7	714.6
55°	3534.1	771.6	689.5	760.9	868.1	862.8	798.9	732.8	694.8	687.2
57.5°	3287.0	672.0	646.1	711.5	814.1	832.4	768.5	699.4	672.0	666.7
60°	2815.7	609.7	618.8	678.1	770.1	802.0	738.1	681.1	662.9	659.1
62.5°	2184.7	567.9	598.3	653.8	735.9	780.7	721.4	678.8	672.0	667.4
65°	1565.2	534.4	576.2	629.4	704.7	760.9	715.3	675.8	677.3	673.5
67.5°	1063.5	504.8	549.6	602.1	674.3	743.5	707.0	665.2	684.2	679.6
70°	744.2	475.9	518.4	567.1	636.3	719.1	691.8	649.2	647.7	629.4
72.5°	580.8	437.9	475.9	518.4	587.6	684.9	661.4	613.5	588.4	569.4
73°	554.2	428.7	465.2	507.8	577.0	676.6	653.0	603.6	575.5	558.0
75°	458.4	389.2	422.7	460.7	531.4	637.0	611.9	558.7	523.0	512.4
77.5°	360.3	333.0	364.9	399.1	468.3	579.3	551.1	500.2	480.4	471.3
80°	266.8	275.9	304.1	334.5	405.9	517.7	492.6	441.7	529.8	507.8
82.5°	187.8	209.0	234.9	262.3	340.6	457.6	427.2	374.8	387.7	322.3
85°	111.0	136.8	161.2	184.7	245.5	379.3	352.7	298.7	244.8	233.4
87.5°	64.6	76.0	82.9	107.2	168.8	285.8	248.6	221.2	126.9	85.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)