

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: P299107

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299107
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
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15737.7 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B2 - U0 - G3

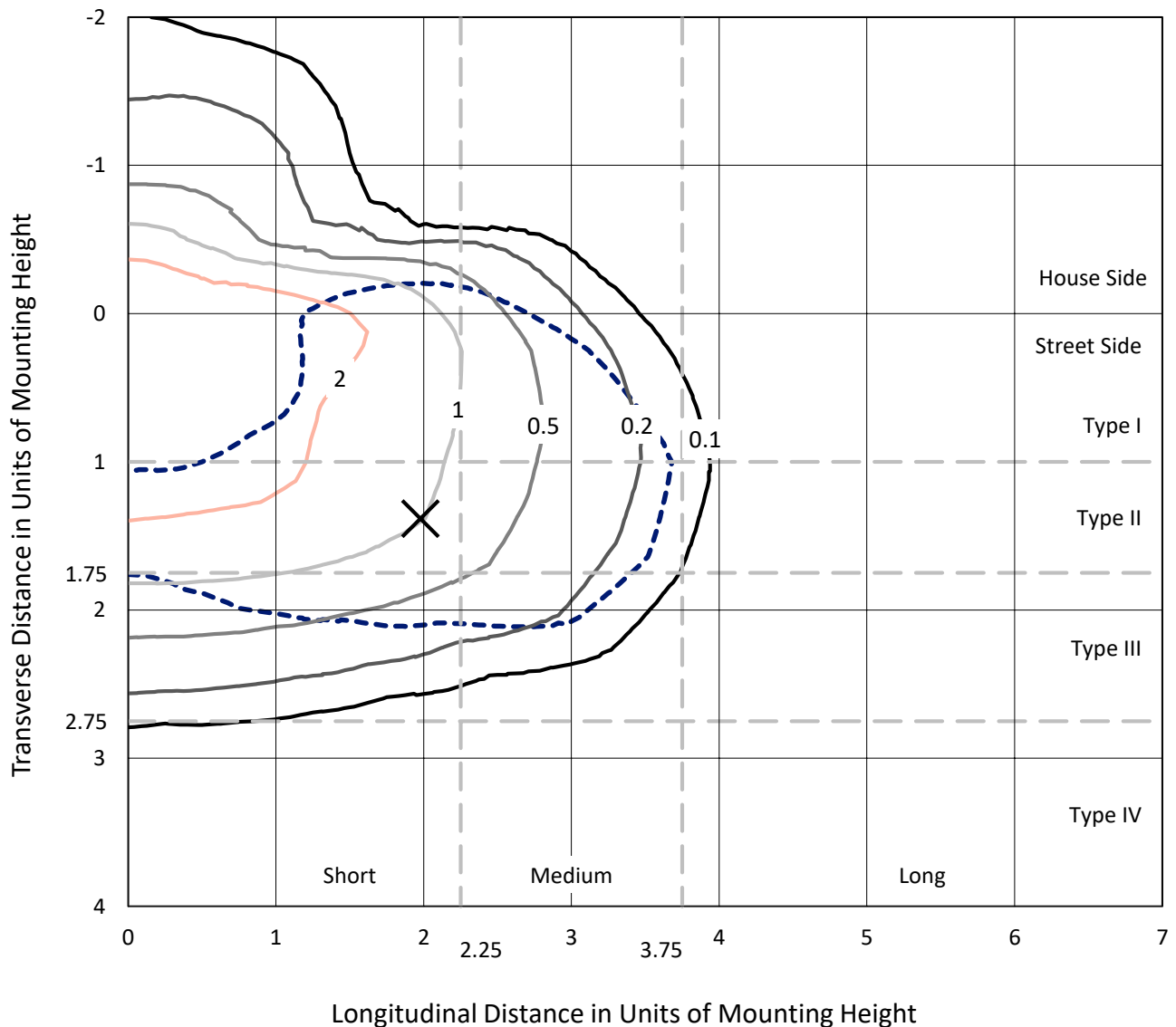
Input Watts (W): 166
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

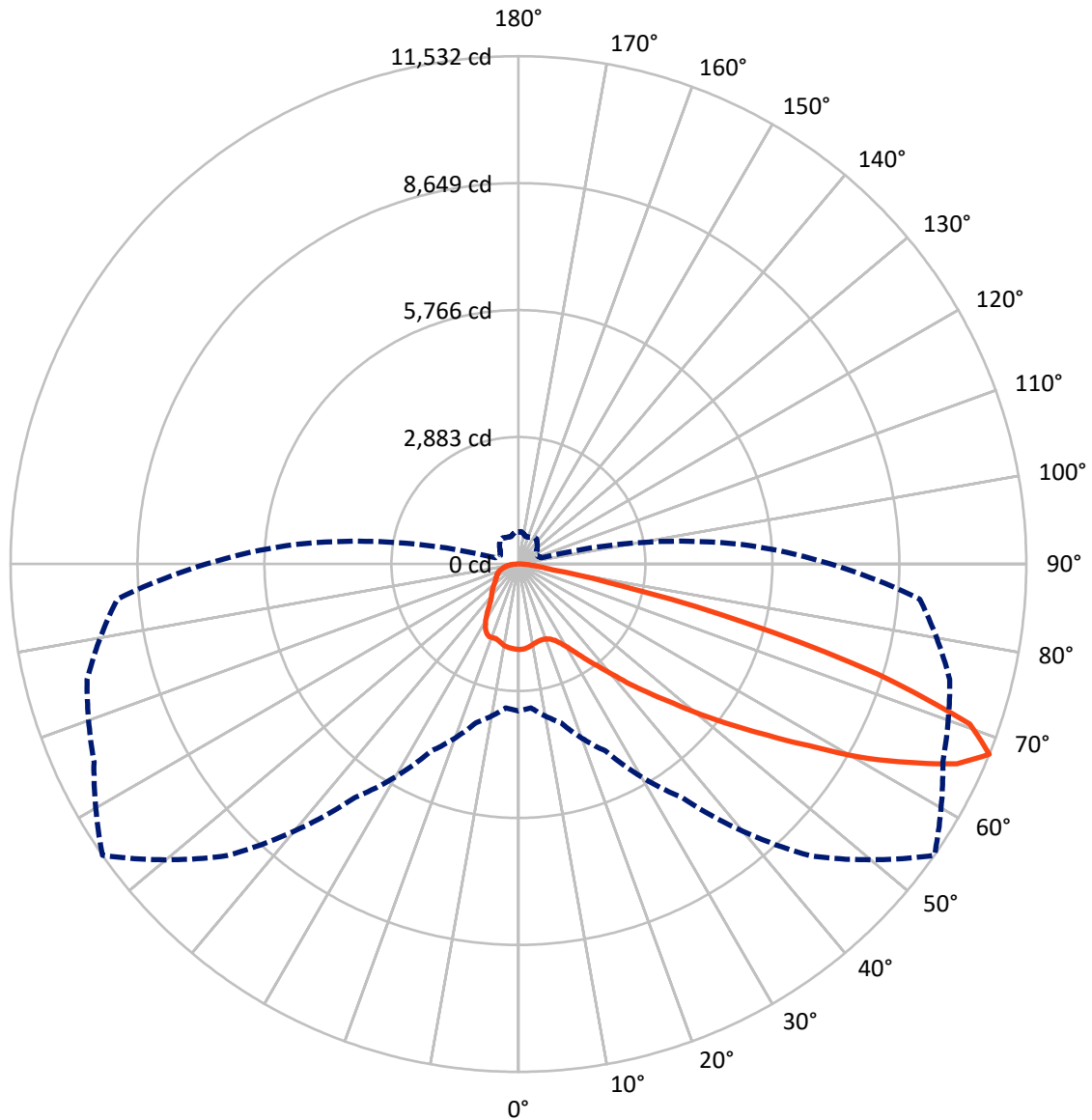
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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	3399.7	0.0	3399.7
	% Fixture	21.6	0.0	21.6
Street Side	Lumens	12338.0	0.0	12338.0
	% Fixture	78.4	0.0	78.4
Total	Lumens	15737.7	0.0	15737.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.1	1.2
10°-20°	513.0	3.3
20°-30°	859.4	5.5
30°-40°	1413.1	9.0
40°-50°	2378.8	15.1
50°-60°	3744.0	23.8
60°-70°	4468.1	28.4
70°-80°	1918.7	12.2
80°-90°	261.6	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°	15737.7	100.0
0°-180°	15737.7	100.0



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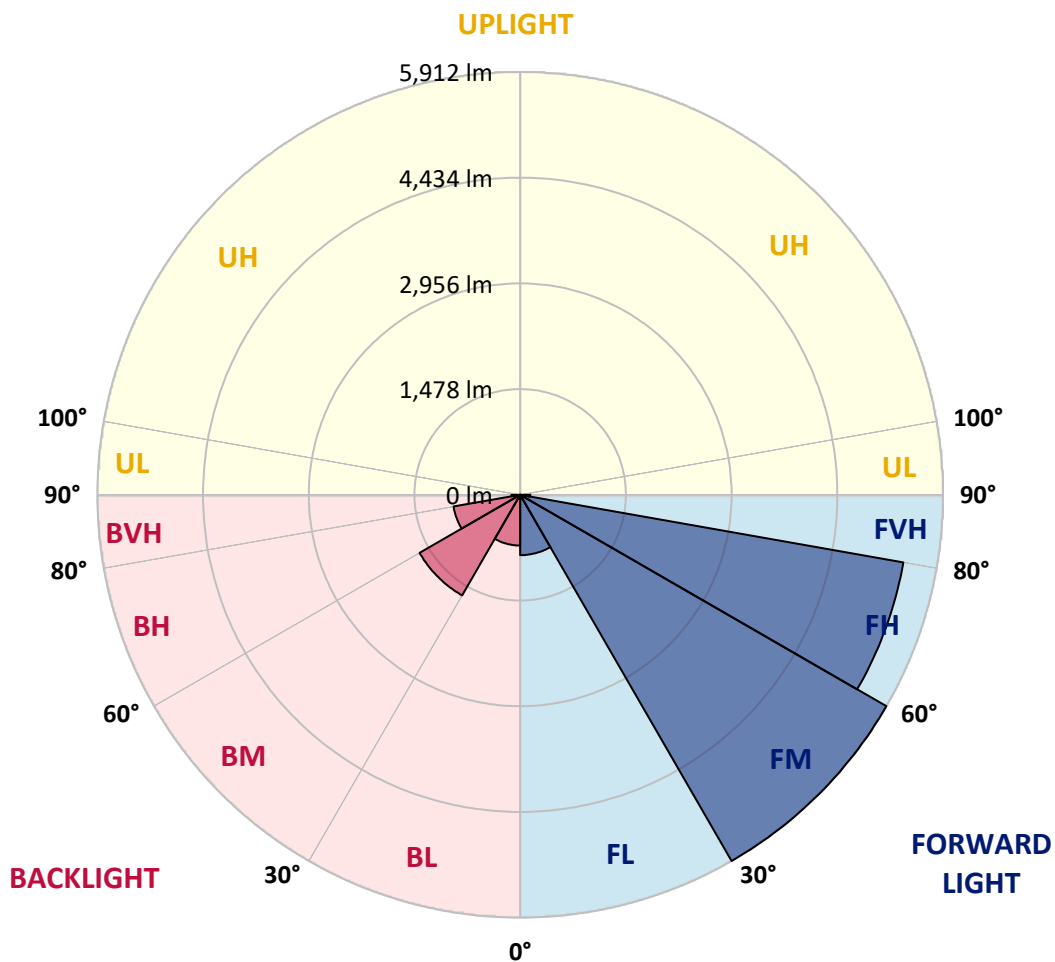
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	843.6	5.4			
FM (30°-60°)	5912.3	37.6			
FH (60°-80°)	5440.6	34.6			G3/7500
FVH (80°-90°)	141.6	0.9			G2/225
BL (0°-30°)	709.9	4.5	B2/1000		
BM (30°-60°)	1623.6	10.3	B2/2500		
BH (60°-80°)	946.1	6.0	B2/1000		G2/1000
BVH (80°-90°)	120.0	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1940.6	1940.6	1940.6	1940.6	1940.6	1940.6	1940.6	1940.6	1940.6	1940.6	1940.6
2.5°	1923.9	1924.7	1926.2	1932.3	1937.6	1936.1	1936.8	1933.8	1933.0	1928.5	1933.0
5°	1899.6	1901.9	1902.6	1912.5	1918.6	1920.1	1917.8	1914.0	1909.5	1904.9	1907.2
7.5°	1844.1	1850.2	1850.9	1864.6	1874.5	1887.4	1888.2	1888.9	1886.7	1883.6	1888.2
10°	1809.1	1810.6	1809.9	1819.8	1827.4	1841.8	1850.2	1864.6	1870.7	1872.2	1875.3
12.5°	1806.8	1805.3	1803.0	1803.0	1800.8	1806.8	1822.1	1842.6	1857.0	1861.6	1865.4
15°	1831.2	1830.4	1822.8	1811.4	1797.0	1792.4	1805.3	1828.1	1847.1	1857.0	1860.8
17.5°	1885.9	1881.3	1869.2	1843.3	1812.2	1800.0	1801.5	1820.5	1842.6	1855.5	1859.3
20°	1986.2	1986.2	1960.4	1911.7	1856.3	1827.4	1813.7	1825.1	1846.4	1863.9	1869.2
22.5°	2159.6	2161.1	2117.7	2037.9	1944.4	1882.9	1848.7	1846.4	1871.5	1891.2	1897.3
25°	2405.1	2399.0	2338.2	2224.2	2082.0	1980.2	1920.9	1907.2	1928.5	1950.5	1958.1
27.5°	2690.9	2668.8	2596.6	2459.0	2275.1	2126.1	2034.9	2012.8	2033.4	2058.5	2066.1
30°	2973.7	2950.9	2865.0	2714.5	2510.0	2321.5	2190.7	2155.0	2183.9	2219.6	2224.2
32.5°	3256.4	3256.4	3160.7	2985.1	2762.3	2554.8	2398.2	2355.7	2403.6	2446.9	2456.8
35°	3594.7	3596.2	3503.5	3292.2	3052.7	2833.0	2660.5	2629.3	2701.5	2731.9	2755.5
37.5°	4010.5	4018.8	3899.5	3644.1	3381.9	3150.8	2945.5	2903.0	2975.2	3058.0	3134.0
40°	4459.7	4470.4	4338.9	4024.2	3761.9	3520.2	3298.2	3221.5	3341.6	3499.7	3597.7
42.5°	4888.4	4943.2	4816.2	4492.4	4210.4	3960.3	3735.3	3623.6	3774.1	4012.8	4097.9
45°	5508.0	5547.5	5326.3	5032.9	4767.6	4487.9	4189.9	4072.1	4282.6	4583.6	4601.1
47.5°	5920.7	5891.1	5778.6	5596.1	5428.1	5166.7	4718.2	4589.0	4868.7	5222.9	5124.8
50°	6140.4	6149.5	6134.3	6145.0	6151.0	5986.8	5365.8	5188.7	5522.4	5950.4	5724.6
52.5°	6345.6	6284.8	6335.0	6584.3	6885.3	6824.5	6070.5	5885.7	6223.2	6757.6	6358.6
55°	6341.1	6248.3	6411.8	6851.9	7504.8	7574.8	6861.8	6648.9	6964.4	7623.4	7030.5
57.5°	6116.8	6121.4	6373.0	6949.2	7936.6	8280.2	7780.0	7460.8	7750.4	8500.6	7643.9
60°	5808.2	5850.0	6212.6	6933.2	8282.5	8858.6	8906.5	8335.7	8520.4	9298.0	8151.7
62.5°	5310.3	5354.4	5854.6	6767.5	8230.0	9415.8	9925.1	9328.4	9325.4	9781.5	8300.7
65°	4525.1	4512.2	5037.4	6148.0	7789.9	9827.8	10936.9	10186.6	9932.0	9789.1	8001.2
67.5°	3337.0	3279.2	3730.0	4682.4	6474.9	9366.4	11532.1	10633.6	10138.7	9145.2	7086.0
70°	1731.6	1673.8	2038.7	2734.2	4258.3	7310.2	10873.0	10402.5	9681.9	7666.0	5551.3
72.5°	740.4	730.5	878.7	1199.5	2060.0	4216.5	8525.7	9003.8	8307.5	5711.7	3816.7
75°	497.9	494.8	550.3	653.7	926.6	1711.1	5335.4	6391.2	6078.1	3541.5	2146.6
77.5°	390.7	386.9	419.6	469.8	600.5	675.0	2367.8	3431.3	3175.9	1541.6	939.5
80°	305.6	302.5	323.1	350.4	431.8	425.7	779.1	1365.2	1056.6	590.6	456.8
82.5°	241.0	241.0	257.7	258.4	306.3	290.4	406.7	601.3	527.5	344.3	279.7
85°	220.4	220.4	237.9	193.1	199.9	183.2	252.4	356.5	334.5	141.4	121.6
87.5°	111.0	107.9	199.9	171.0	108.7	97.3	123.1	172.6	185.5	78.3	60.8
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°	1940.6	1940.6	1940.6	1940.6	1940.6	1940.6	1940.6	1940.6	1940.6	1940.6
2.5°	1931.5	1930.8	1932.3	1933.0	1939.1	1947.5	1951.3	1956.6	1959.6	1958.1
5°	1908.7	1910.2	1916.3	1920.9	1931.5	1945.2	1952.8	1958.9	1964.2	1961.9
7.5°	1889.7	1893.5	1902.6	1906.4	1912.5	1916.3	1915.5	1917.8	1922.4	1917.1
10°	1879.1	1883.6	1890.5	1885.1	1870.7	1850.2	1831.2	1821.3	1824.3	1820.5
12.5°	1868.4	1874.5	1869.2	1844.1	1803.8	1777.2	1762.8	1764.3	1771.1	1772.6
15°	1862.3	1864.6	1841.8	1794.7	1753.6	1749.8	1757.4	1755.9	1756.7	1756.7
17.5°	1862.3	1856.3	1813.7	1766.6	1749.1	1742.2	1718.7	1689.0	1676.1	1671.5
20°	1872.2	1856.3	1804.6	1773.4	1735.4	1676.9	1614.5	1559.8	1535.5	1528.6
22.5°	1901.9	1874.5	1830.4	1776.4	1668.5	1570.4	1471.6	1406.3	1362.2	1354.6
25°	1961.9	1931.5	1881.3	1736.2	1562.1	1422.2	1309.7	1236.7	1192.7	1186.6
27.5°	2066.8	2047.1	1908.7	1647.2	1420.7	1271.0	1166.8	1110.6	1077.9	1075.6
30°	2224.9	2215.0	1895.0	1515.7	1246.6	1124.2	1074.1	1041.4	1017.1	1016.3
32.5°	2477.3	2397.5	1850.2	1355.3	1087.8	1020.1	999.6	979.8	960.8	960.8
35°	2801.9	2544.9	1765.0	1183.5	991.2	962.3	936.5	905.3	880.2	878.7
37.5°	3183.5	2636.2	1612.3	1045.2	945.6	923.6	885.6	839.2	795.1	787.5
40°	3568.8	2663.5	1397.1	960.1	916.7	884.8	838.4	783.7	741.1	738.9
42.5°	3922.3	2611.1	1169.1	901.5	887.8	845.3	796.6	748.0	714.5	713.8
45°	4218.8	2475.0	977.5	846.0	857.4	809.5	766.2	726.7	700.8	695.5
47.5°	4497.7	2282.7	843.0	787.5	827.0	789.8	753.3	716.0	691.0	687.2
50°	4821.6	2075.2	748.7	730.5	800.4	782.9	763.9	725.2	683.4	678.8
52.5°	5213.8	1895.8	675.0	680.3	779.9	792.1	791.3	751.0	678.0	672.0
55°	5651.6	1696.6	619.5	639.3	771.5	808.8	798.1	775.3	682.6	673.5
57.5°	6082.6	1464.0	580.7	608.1	759.4	807.3	765.5	732.8	693.2	680.3
60°	6405.7	1151.6	551.1	580.7	732.8	782.2	729.7	686.4	691.0	681.1
62.5°	6427.0	890.1	515.4	557.2	692.5	757.1	706.2	665.9	700.8	691.7
65°	6049.2	672.7	481.2	529.1	649.2	741.1	683.4	654.5	721.4	711.5
67.5°	5092.9	541.2	452.3	500.2	605.8	707.7	662.8	643.8	739.6	722.1
70°	3676.8	461.4	424.2	465.2	567.1	669.7	644.6	624.8	690.2	662.8
72.5°	2263.7	399.8	392.2	418.8	537.4	630.2	617.2	589.1	621.8	599.7
75°	1130.3	346.6	356.5	373.2	495.6	585.3	571.6	543.5	548.1	543.5
77.5°	541.2	296.5	314.7	327.6	441.6	534.4	519.9	491.0	485.7	486.5
80°	342.8	247.8	265.3	274.4	394.5	475.1	460.6	431.8	492.6	456.8
82.5°	214.4	201.4	206.0	222.7	343.6	413.5	394.5	368.7	443.9	351.2
85°	118.6	140.6	146.7	161.1	264.5	345.9	326.9	294.2	263.8	259.2
87.5°	70.7	83.6	85.9	96.5	177.9	250.1	221.2	209.8	174.1	173.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)