

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: P300849

Luminaire Tested: **GLNA-AF-02-LED-E1-SL4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300849
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
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-SL4
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11531.6 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G3

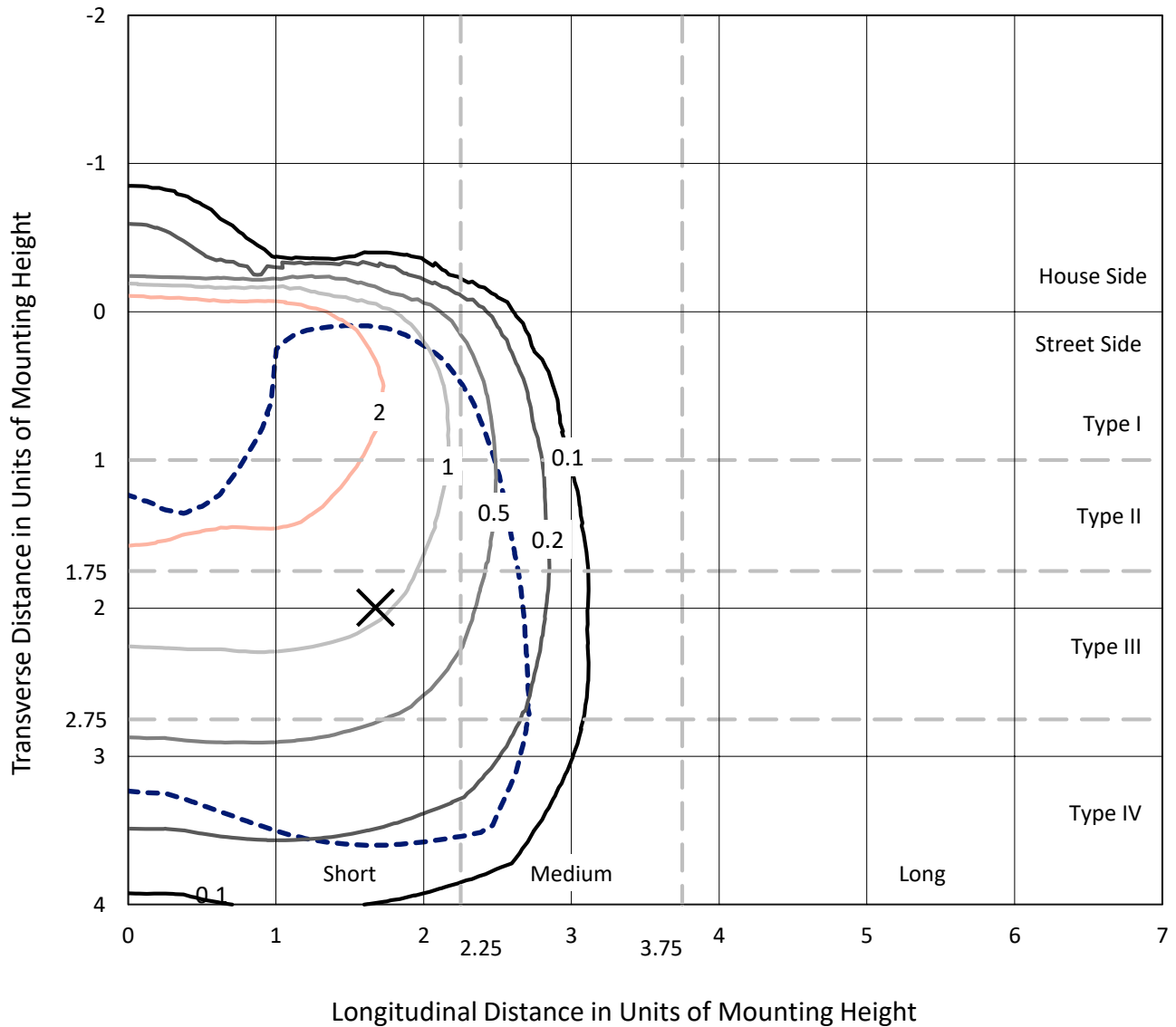
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P300849
 CATALOG NUMBER: GLNA-AF-02-LED-E1-SL4

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

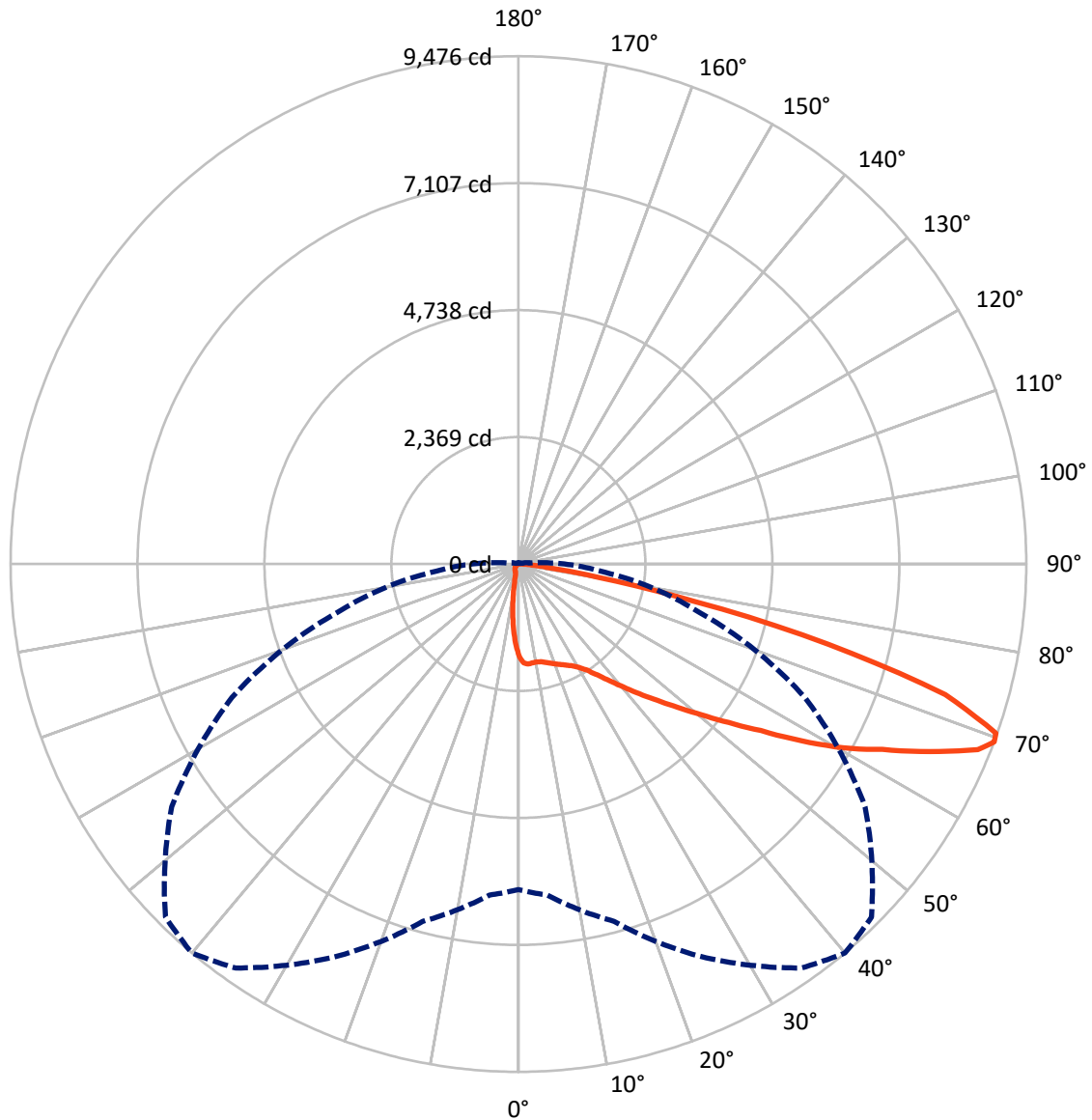


Based on 20 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P300849

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P300849

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	674.7	0.0	674.7
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	10856.9	0.0	10856.9
	% Fixture	94.1	0.0	94.1
Total	Lumens	11531.6	0.0	11531.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.7	1.2
10°-20°	343.5	3.0
20°-30°	578.6	5.0
30°-40°	947.2	8.2
40°-50°	1640.1	14.2
50°-60°	2583.3	22.4
60°-70°	3373.7	29.3
70°-80°	1737.6	15.1
80°-90°	188.0	1.6
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°	11531.6	100.0
0°-180°	11531.6	100.0



REPORT NUMBER: P300849

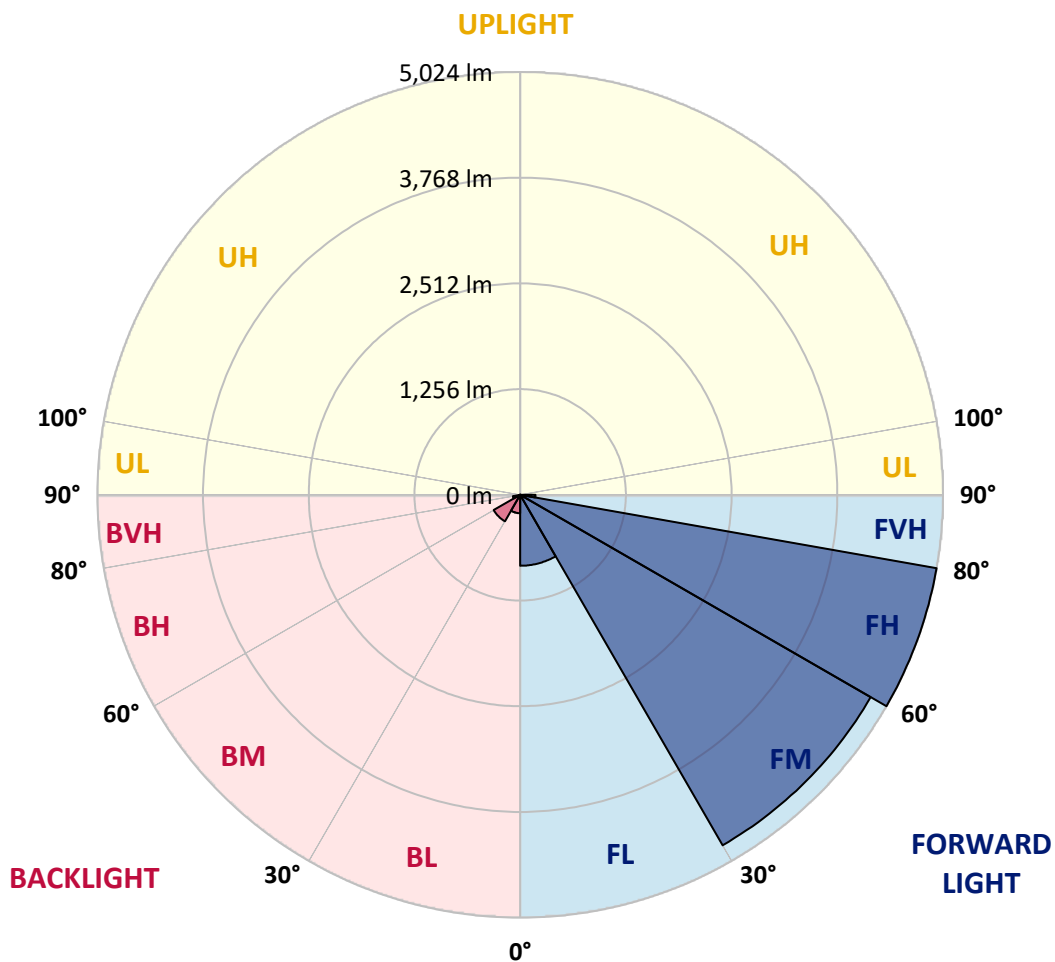
CATALOG NUMBER: GLNA-AF-02-LED-E1-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	843.3	7.3			
FM	(30°-60°)	4808.0	41.7			
FH	(60°-80°)	5023.6	43.6			G3/7500
FVH	(80°-90°)	182.1	1.6			G2/225
BL	(0°-30°)	218.5	1.9	B1/500		
BM	(30°-60°)	362.6	3.1	B1/1000		
BH	(60°-80°)	87.6	0.8	B0/110		G0/110
BVH	(80°-90°)	5.9	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





REPORT NUMBER: P300849

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1722.9	1722.9	1722.9	1722.9	1722.9	1722.9	1722.9	1722.9	1722.9	1722.9	1722.9
2.5°	1891.7	1881.4	1875.3	1867.0	1856.7	1847.8	1844.4	1819.0	1795.0	1762.0	1724.3
5°	1926.7	1923.3	1912.3	1901.3	1889.0	1875.3	1867.7	1837.5	1803.2	1755.1	1689.2
7.5°	1930.2	1926.1	1912.3	1897.2	1880.1	1863.6	1850.6	1820.4	1788.8	1740.0	1659.7
10°	1924.7	1919.9	1909.6	1893.1	1871.8	1856.0	1843.0	1814.2	1787.4	1743.5	1654.2
12.5°	1918.5	1913.7	1908.9	1900.7	1882.1	1871.1	1860.2	1832.7	1808.7	1771.6	1674.1
15°	1924.7	1921.9	1927.4	1924.0	1913.7	1904.1	1893.1	1868.4	1846.4	1815.5	1710.5
17.5°	1950.8	1950.8	1967.9	1970.0	1960.4	1946.6	1930.9	1906.2	1887.6	1861.5	1753.8
20°	2011.9	2009.8	2031.8	2035.9	2012.5	1991.3	1967.9	1937.7	1923.3	1906.8	1796.3
22.5°	2116.9	2107.3	2120.3	2116.2	2070.2	2037.3	2008.4	1971.4	1963.8	1956.3	1843.7
25°	2253.5	2248.0	2256.9	2216.4	2135.4	2090.8	2056.5	2014.6	2014.6	2022.2	1897.2
27.5°	2451.8	2431.3	2401.0	2329.7	2208.2	2151.2	2114.1	2069.5	2081.2	2109.3	1967.9
30°	2655.0	2632.4	2563.0	2453.2	2296.7	2237.0	2193.8	2147.1	2174.5	2226.0	2062.7
32.5°	2855.5	2830.1	2731.9	2593.2	2423.7	2364.0	2322.1	2270.6	2316.6	2403.1	2201.3
35°	3049.7	3027.1	2913.8	2750.4	2592.6	2543.1	2504.7	2460.1	2519.1	2639.9	2396.9
37.5°	3268.0	3243.3	3105.3	2928.2	2797.8	2762.1	2734.0	2689.3	2792.3	2969.4	2669.4
40°	3536.4	3494.5	3308.5	3132.1	3035.3	3018.1	2998.9	2992.7	3152.7	3397.7	3032.5
42.5°	3843.9	3775.2	3521.3	3346.9	3296.1	3308.5	3303.7	3331.1	3603.6	3930.4	3474.6
45°	4151.4	4062.8	3758.1	3576.2	3583.0	3626.3	3653.1	3762.9	4168.5	4541.3	3950.3
47.5°	4412.2	4325.0	3985.3	3824.0	3906.3	3991.5	4064.2	4272.2	4749.2	5142.6	4320.2
50°	4635.3	4552.9	4226.2	4096.5	4281.8	4419.1	4537.1	4845.3	5373.9	5600.4	4579.7
52.5°	4817.9	4763.0	4476.1	4408.8	4710.8	4911.9	5084.9	5454.2	5927.1	5972.4	4781.5
55°	4995.7	4956.5	4744.4	4780.1	5214.6	5488.5	5707.5	6100.1	6403.5	6282.7	4975.1
57.5°	5200.2	5164.5	5050.6	5251.0	5877.0	6221.6	6460.5	6672.6	6822.9	6599.8	5157.7
60°	5408.9	5388.3	5391.0	5774.1	6637.6	6968.4	7100.2	7155.1	7234.7	6898.4	5168.0
62.5°	5607.9	5647.1	5780.2	6356.1	7365.8	7619.8	7686.4	7740.6	7647.3	6945.7	4774.6
65°	5945.0	6008.8	6326.6	7135.2	8166.9	8438.7	8507.3	8321.3	7712.5	6333.5	3883.7
67.5°	6109.7	6226.4	6793.4	7861.4	8943.9	9245.9	9220.5	8359.1	6921.0	4829.6	2492.3
69°	6075.4	6199.6	6901.1	8083.8	9202.0	9475.8	9314.5	7897.1	5896.2	3498.6	1530.0
70°	5939.5	6065.1	6845.5	8075.6	9234.9	9451.8	9140.2	7326.7	4985.4	2558.2	956.9
72.5°	4960.0	5068.4	6077.4	7299.2	8507.3	8330.9	7646.6	5076.0	2429.2	696.7	215.5
75°	3053.1	3113.5	4360.7	5498.8	6425.5	5972.4	5094.5	2525.3	724.2	197.0	119.4
77.5°	1613.1	1640.5	2387.3	3241.2	4073.1	3370.3	2611.1	985.0	333.6	123.6	86.5
80°	953.4	974.0	1285.6	1482.0	1762.7	1472.3	1044.0	604.7	238.9	77.6	76.9
82.5°	545.7	558.7	932.1	823.7	694.6	593.1	519.6	573.1	143.5	52.2	79.6
85°	200.4	203.2	524.4	626.7	413.2	245.7	258.1	475.0	38.4	32.9	62.5
87.5°	93.4	91.3	269.8	383.7	241.6	155.8	201.1	104.3	15.1	21.3	17.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P300849

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1722.9	1722.9	1722.9	1722.9	1722.9	1722.9	1722.9	1722.9	1722.9	1722.9	1722.9
2.5°	1702.3	1676.9	1630.9	1583.5	1535.5	1498.4	1462.0	1433.2	1423.6	1405.8	1407.1
5°	1650.1	1603.4	1507.3	1409.9	1308.3	1224.5	1145.6	1081.8	1050.9	1019.3	1019.3
7.5°	1604.8	1536.9	1386.5	1228.0	1063.9	926.0	801.7	708.4	656.9	615.7	615.0
10°	1587.7	1495.7	1285.6	1058.4	829.9	641.8	494.2	399.5	350.8	319.2	317.8
12.5°	1595.2	1481.3	1208.1	901.9	615.0	412.5	286.2	225.1	204.5	194.9	194.9
15°	1617.2	1477.1	1130.5	748.9	434.5	258.1	190.1	173.7	172.3	172.3	172.3
17.5°	1643.9	1478.5	1050.9	599.9	295.8	184.6	164.1	162.0	163.4	163.4	163.4
20°	1671.4	1479.2	965.1	462.0	208.7	160.6	154.4	153.8	155.1	155.1	155.8
22.5°	1705.0	1482.6	879.3	345.3	172.3	151.7	146.9	146.9	147.6	147.6	146.9
25°	1743.5	1489.5	790.1	256.0	157.2	145.5	141.4	140.7	141.4	140.7	140.0
27.5°	1791.5	1499.1	690.5	200.4	150.3	139.3	135.9	135.9	135.2	134.5	133.8
30°	1851.9	1510.1	578.6	170.2	143.5	133.8	130.4	129.7	129.0	127.7	127.7
32.5°	1943.9	1534.1	468.1	154.4	135.9	126.3	123.6	123.6	122.2	120.8	120.1
35°	2085.3	1581.5	369.3	144.8	127.7	118.1	114.6	114.6	113.3	112.6	111.9
37.5°	2280.9	1653.6	286.9	135.9	119.4	109.1	105.7	105.0	103.6	102.3	101.6
40°	2541.1	1742.8	225.8	127.7	111.2	100.2	97.5	96.1	93.4	91.3	91.3
42.5°	2867.8	1844.4	183.3	118.7	101.6	92.0	89.9	87.9	83.1	81.0	80.3
45°	3209.6	1935.7	155.1	108.5	92.0	83.7	82.4	78.9	72.8	70.7	70.7
47.5°	3456.1	1956.9	136.6	98.8	83.1	74.8	74.1	68.0	62.5	61.1	60.4
50°	3609.8	1915.1	121.5	89.2	74.8	66.6	64.5	57.0	53.5	52.2	51.5
52.5°	3713.5	1840.3	109.1	81.0	67.3	59.0	54.2	48.7	46.0	44.6	44.6
55°	3796.5	1734.5	96.8	73.4	61.1	52.9	46.0	41.9	39.1	37.8	37.8
57.5°	3819.9	1591.1	84.4	67.3	54.9	46.7	39.1	36.4	32.9	32.3	32.3
60°	3650.3	1332.3	74.8	59.7	49.4	40.5	34.3	30.9	27.5	26.8	26.1
62.5°	3203.5	1031.0	65.9	52.9	43.2	35.0	29.5	25.4	22.7	22.7	22.7
65°	2443.6	691.2	57.7	46.0	37.8	29.5	25.4	20.6	19.2	19.2	19.9
67.5°	1462.7	376.2	49.4	39.1	32.3	24.7	21.3	17.8	17.2	17.8	17.8
69°	857.3	221.0	44.6	35.0	28.1	22.0	18.5	15.8	17.2	17.8	17.8
70°	529.2	149.0	41.2	31.6	25.4	19.9	17.2	15.1	16.5	17.2	17.2
72.5°	147.6	76.9	32.9	24.7	20.6	16.5	13.7	13.7	15.8	16.5	16.5
75°	96.1	57.0	25.4	18.5	15.8	13.0	11.7	13.0	15.1	15.8	15.8
77.5°	79.6	46.7	20.6	15.1	13.0	12.4	11.0	11.7	13.7	14.4	14.4
80°	72.8	32.9	16.5	13.7	11.7	11.0	10.3	9.6	12.4	13.0	13.0
82.5°	69.3	26.1	14.4	12.4	11.0	9.6	8.9	9.6	11.0	11.7	12.4
85°	43.2	17.2	13.0	11.7	9.6	8.9	8.9	8.9	10.3	11.0	11.0
87.5°	15.8	13.7	11.7	9.6	8.2	8.2	8.2	8.2	8.9	10.3	10.3
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)