

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: P299947

Luminaire Tested: **GLNA-AF-03-LED-E1-SL3-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299947
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)
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-SL3-7027-600
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Medium OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10366 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

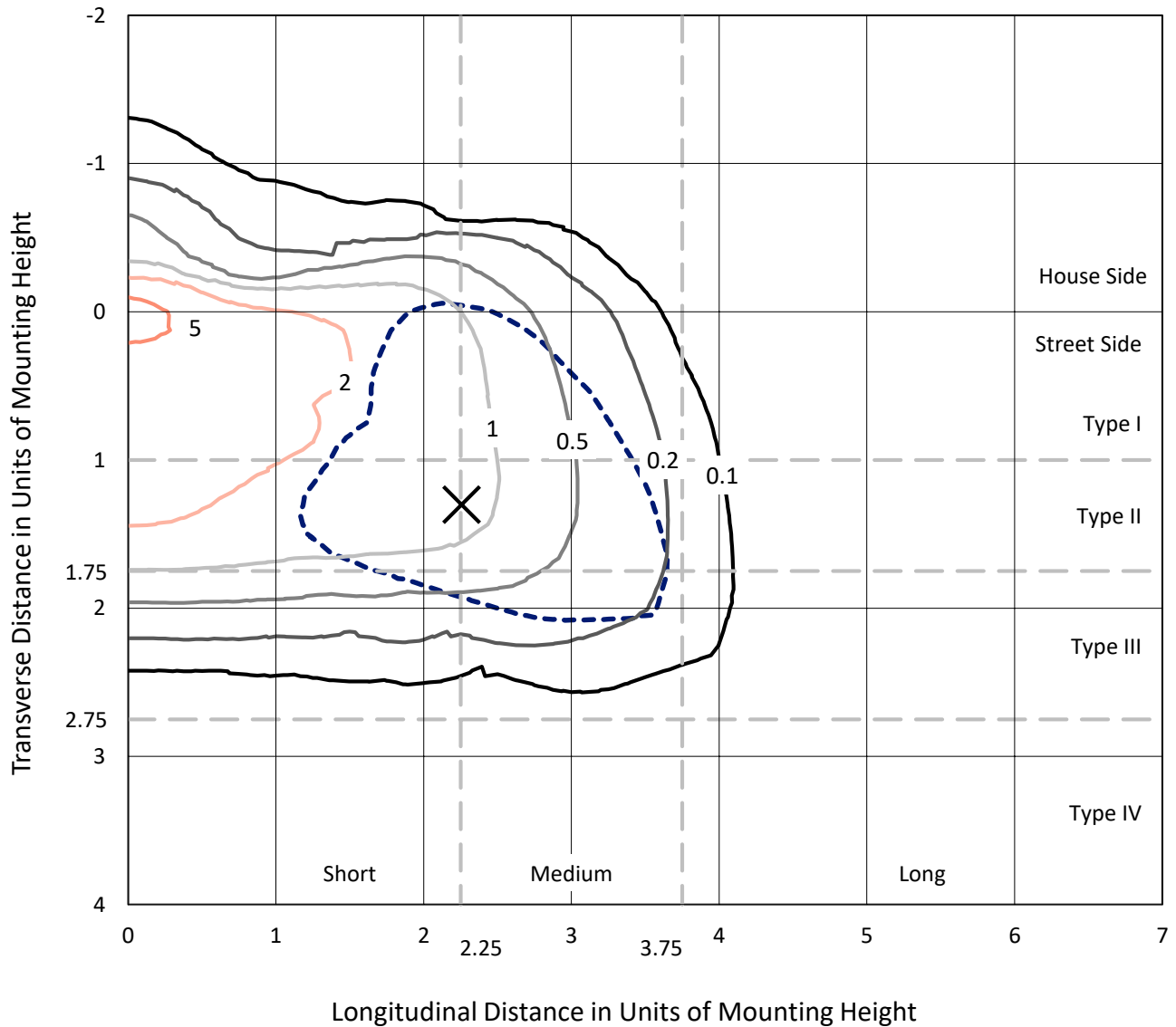
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299947
 CATALOG NUMBER: GLNA-AF-03-LED-E1-SL3-7027-600

Iso-Footcandle Lines of Horizontal Illumination

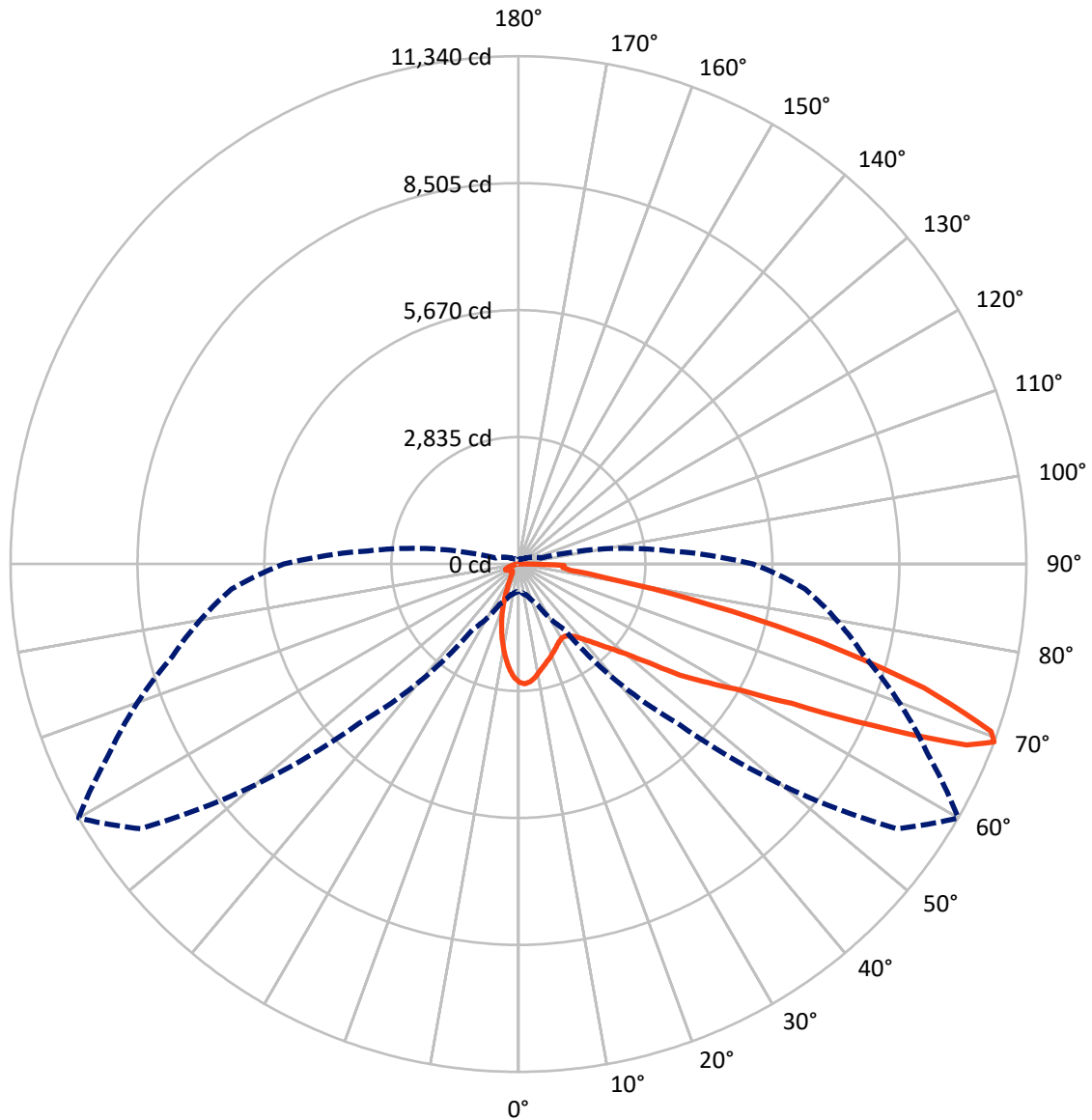
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.6 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P299947
CATALOG NUMBER: GLNA-AF-03-LED-E1-SL3-7027-600

Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P299947

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL3-7027-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1474.7	0.0	1474.7
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	8891.2	0.0	8891.2
	% Fixture	85.8	0.0	85.8
Total	Lumens	10366.0	0.0	10366.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.3	2.2
10°-20°	475.8	4.6
20°-30°	606.3	5.8
30°-40°	833.5	8.0
40°-50°	1352.5	13.0
50°-60°	2169.0	20.9
60°-70°	2886.8	27.8
70°-80°	1558.6	15.0
80°-90°	260.1	2.5
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°	10366.0	100.0
0°-180°	10366.0	100.0

Coefficient of Utilization



REPORT NUMBER: P299947

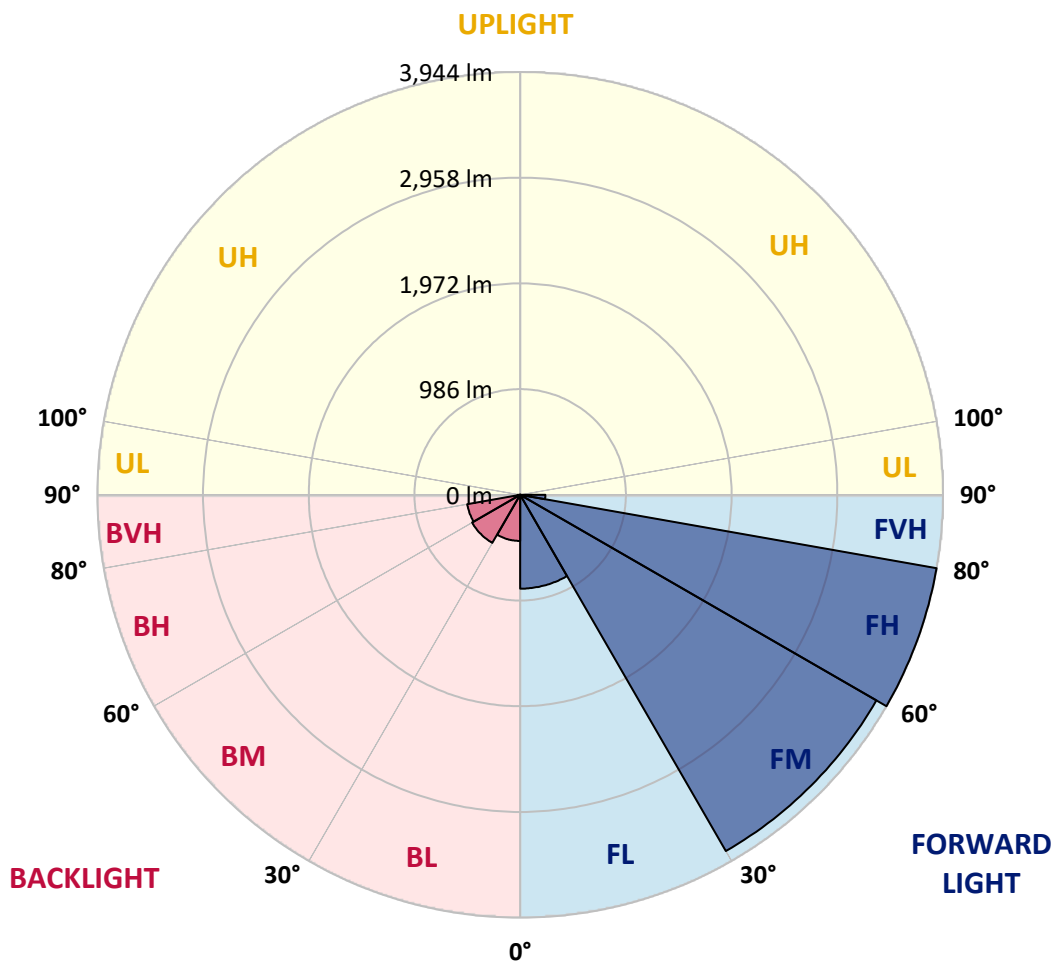
CATALOG NUMBER: GLNA-AF-03-LED-E1-SL3-7027-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	875.3	8.4			
FM (30°-60°)	3836.9	37.0			
FH (60°-80°)	3944.0	38.0			G2/5000
FVH (80°-90°)	235.0	2.3			G3/500
BL (0°-30°)	430.2	4.2	B1/500		
BM (30°-60°)	518.1	5.0	B1/1000		
BH (60°-80°)	501.4	4.8	B2/1000		G2/1000
BVH (80°-90°)	25.0	0.2			G1/100
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 Medium





REPORT NUMBER: P299947

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL3-7027-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	2641.4	2641.4	2641.4	2641.4	2641.4	2641.4	2641.4	2641.4	2641.4	2641.4	2641.4
2.5°	2695.5	2701.5	2699.0	2697.5	2702.0	2695.0	2680.5	2676.0	2668.9	2652.4	2624.4
5°	2594.3	2612.4	2611.4	2624.9	2647.4	2653.4	2646.9	2647.9	2634.9	2614.4	2567.8
7.5°	2419.6	2427.1	2431.1	2460.6	2501.7	2534.7	2562.8	2571.8	2565.8	2548.3	2488.2
10°	2239.3	2245.3	2254.8	2289.4	2341.5	2387.0	2440.1	2470.7	2483.7	2480.7	2413.6
12.5°	2084.6	2090.6	2103.1	2142.2	2204.3	2260.3	2337.5	2375.5	2406.6	2425.1	2353.0
15°	1945.9	1958.9	1970.9	2016.0	2085.6	2159.2	2246.3	2294.4	2342.5	2384.0	2299.4
17.5°	1837.7	1850.7	1857.7	1898.8	1972.9	2063.0	2165.2	2221.8	2281.9	2350.0	2246.3
20°	1775.1	1781.1	1778.1	1801.2	1867.8	1963.4	2084.6	2150.2	2222.8	2317.9	2193.2
22.5°	1757.6	1758.1	1747.1	1744.6	1787.6	1868.3	1998.5	2078.1	2167.2	2296.9	2147.7
25°	1800.2	1798.7	1768.6	1744.1	1748.6	1795.7	1915.3	2008.0	2120.6	2292.4	2112.6
27.5°	1894.8	1899.3	1854.7	1808.7	1763.1	1761.6	1852.2	1949.9	2082.6	2312.9	2097.6
30°	2027.5	2035.0	1987.4	1928.9	1843.2	1772.6	1827.7	1915.3	2059.0	2355.5	2095.1
32.5°	2172.7	2180.7	2144.7	2083.1	1970.9	1840.7	1844.7	1918.3	2058.0	2415.1	2112.1
35°	2327.4	2336.5	2317.9	2265.8	2141.2	1966.4	1909.8	1966.9	2090.6	2506.2	2157.7
37.5°	2500.2	2514.2	2519.2	2469.6	2336.5	2132.2	2016.5	2059.0	2164.2	2632.9	2241.3
40°	2749.1	2768.6	2767.1	2696.0	2560.3	2356.0	2181.2	2192.2	2278.9	2802.1	2375.0
42.5°	3225.8	3229.8	3105.1	2950.4	2806.6	2591.3	2375.5	2366.5	2437.1	3016.5	2571.8
45°	3832.2	3815.6	3538.2	3239.3	3064.0	2861.7	2628.4	2584.3	2637.9	3277.8	2818.2
47.5°	4335.4	4297.3	3946.8	3534.2	3336.4	3155.7	2925.3	2848.2	2877.8	3574.3	3136.6
50°	4510.2	4481.6	4191.2	3779.6	3594.3	3514.2	3290.9	3181.7	3189.7	3927.8	3509.7
52.5°	4472.6	4468.6	4274.8	3941.3	3835.7	3890.7	3808.6	3660.9	3582.8	4320.4	3912.3
55°	4384.0	4392.5	4322.4	4129.6	4111.6	4254.3	4485.1	4376.0	4133.1	4716.5	4328.4
57.5°	4076.0	4098.1	4252.3	4366.5	4555.7	4768.0	5029.9	4998.9	4725.5	5144.6	4823.1
60°	3283.9	3334.9	3748.5	4320.4	5012.9	5676.9	5794.1	5722.0	5336.4	5675.9	5476.6
62.5°	2300.9	2354.0	2845.7	3740.5	4937.8	6703.4	7160.1	6849.1	6213.7	6458.5	6322.3
65°	1231.8	1257.4	1632.9	2595.3	4168.7	6915.2	9156.5	8683.3	7602.7	7423.5	7045.9
67.5°	679.5	693.5	837.2	1310.4	2669.9	6089.5	10428.4	10785.9	9338.8	8065.9	6914.2
69°	614.4	627.4	721.6	992.5	1786.6	5034.9	10304.2	11340.3	10099.9	8002.3	6427.5
70°	600.9	612.9	697.5	914.9	1446.1	4150.1	9888.1	11198.5	10281.2	7774.5	6002.9
72.5°	540.8	553.8	635.9	821.7	1235.8	2069.1	7832.6	9468.5	9334.3	6741.0	4553.2
75°	504.2	516.3	655.5	804.7	1183.2	1309.4	5163.6	6978.3	6861.6	4715.5	2455.1
77.5°	215.8	214.8	303.9	681.0	1200.8	1267.9	2774.6	4359.4	3977.4	2015.5	705.0
80°	144.2	141.7	144.2	200.3	1101.1	1274.9	1453.6	2212.8	1671.5	513.8	347.5
82.5°	124.2	122.2	126.7	122.2	387.1	1455.2	1235.8	1176.7	794.7	291.9	172.3
85°	83.6	80.1	109.2	109.7	182.8	1292.9	1392.1	994.0	643.0	173.3	85.1
87.5°	40.1	39.1	63.6	77.6	107.2	525.3	1561.8	1018.5	648.5	88.6	40.6
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: P299947

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL3-7027-600

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2641.4	2641.4	2641.4	2641.4	2641.4	2641.4	2641.4	2641.4	2641.4	2641.4	2641.4
2.5°	2615.9	2595.3	2575.3	2551.3	2526.2	2498.2	2484.2	2470.1	2466.6	2462.6	2448.6
5°	2543.8	2514.7	2464.6	2409.6	2351.5	2294.9	2251.8	2224.8	2204.3	2193.7	2175.2
7.5°	2450.6	2408.1	2320.4	2225.3	2127.6	2038.5	1961.4	1912.8	1866.8	1845.2	1820.7
10°	2362.0	2298.4	2162.2	2022.0	1881.8	1747.1	1620.4	1530.8	1451.1	1406.6	1375.0
12.5°	2285.9	2198.7	2010.0	1820.2	1627.9	1436.1	1246.3	1097.1	972.4	906.8	873.3
15°	2211.8	2106.6	1865.3	1624.4	1377.5	1116.6	867.3	698.0	594.9	553.8	539.8
17.5°	2144.7	2010.0	1720.0	1427.1	1119.2	803.7	582.9	489.7	450.2	436.6	432.1
20°	2072.1	1912.3	1569.3	1220.8	849.8	561.8	455.2	414.1	398.1	394.1	392.1
22.5°	2002.0	1816.2	1425.1	1000.0	610.4	433.6	391.1	374.1	371.5	375.1	375.1
25°	1942.4	1730.1	1269.4	769.1	448.2	365.0	350.0	346.0	355.5	368.5	371.0
27.5°	1897.8	1659.5	1103.6	567.8	357.0	317.5	317.0	323.5	347.0	372.0	377.1
30°	1867.3	1592.4	926.4	409.6	299.4	279.4	287.4	301.4	336.0	371.5	381.1
32.5°	1851.7	1542.8	741.6	317.0	256.4	245.4	258.9	275.9	310.0	343.0	355.5
35°	1863.8	1506.2	567.3	264.4	226.3	217.8	231.8	248.4	268.4	282.4	291.9
37.5°	1908.8	1491.7	428.1	236.8	205.8	197.8	208.8	218.3	226.3	230.3	234.8
40°	2006.0	1507.2	343.0	222.8	194.3	184.3	188.8	192.3	197.3	201.3	203.3
42.5°	2149.2	1553.8	307.5	217.3	188.3	173.8	172.8	174.3	180.8	188.3	189.8
45°	2349.5	1635.9	305.0	220.8	185.3	165.2	160.7	162.7	172.8	184.3	186.3
47.5°	2605.3	1761.1	325.0	231.3	187.8	160.7	153.2	155.7	168.2	183.8	186.3
50°	2915.3	1935.9	358.5	246.9	198.8	161.7	150.7	152.2	165.2	182.3	184.8
52.5°	3281.3	2183.7	395.1	261.9	210.3	168.2	152.7	149.2	161.2	176.3	179.3
55°	3688.5	2501.7	432.6	275.4	216.3	176.3	156.7	145.2	153.7	166.2	168.7
57.5°	4188.2	2946.4	497.7	288.4	220.3	181.8	160.7	141.2	144.2	153.2	155.2
60°	4864.7	3575.3	612.4	310.0	229.3	183.8	160.2	137.7	134.7	139.7	140.7
62.5°	5675.4	4258.3	708.0	337.0	244.4	185.3	157.2	135.2	126.7	126.7	127.7
65°	6156.6	4441.1	655.0	359.5	256.9	183.8	153.7	132.7	120.7	115.2	115.7
67.5°	5748.5	3905.8	561.3	364.0	256.4	176.8	148.2	128.2	114.7	106.2	105.7
69°	5237.2	3370.0	519.3	352.0	244.4	167.7	141.2	123.2	110.2	101.1	100.6
70°	4825.1	3043.0	491.7	339.0	231.3	161.2	135.7	118.7	106.7	98.1	97.1
72.5°	3508.2	1993.9	420.1	291.4	190.8	135.2	117.2	104.2	95.1	90.1	89.1
75°	1753.1	950.9	341.0	236.3	146.2	108.2	96.1	87.1	82.6	81.6	81.1
77.5°	575.9	435.6	243.9	176.3	108.7	84.6	77.6	71.1	70.1	73.1	72.1
80°	316.5	253.4	154.7	116.7	74.1	62.1	61.1	57.6	59.1	64.1	63.1
82.5°	161.2	131.7	95.6	70.1	50.1	44.6	48.6	46.6	48.6	53.1	52.6
85°	79.6	72.1	60.6	42.6	33.0	28.5	34.6	36.1	37.1	40.6	40.6
87.5°	46.1	42.6	32.0	20.0	16.5	15.0	20.0	19.5	23.0	25.0	24.5
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)