

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: P299468

Luminaire Tested: **GLNA-AF-03-LED-E1-5NQ-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299468
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)
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-E1-5NQ-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11903.4 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

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

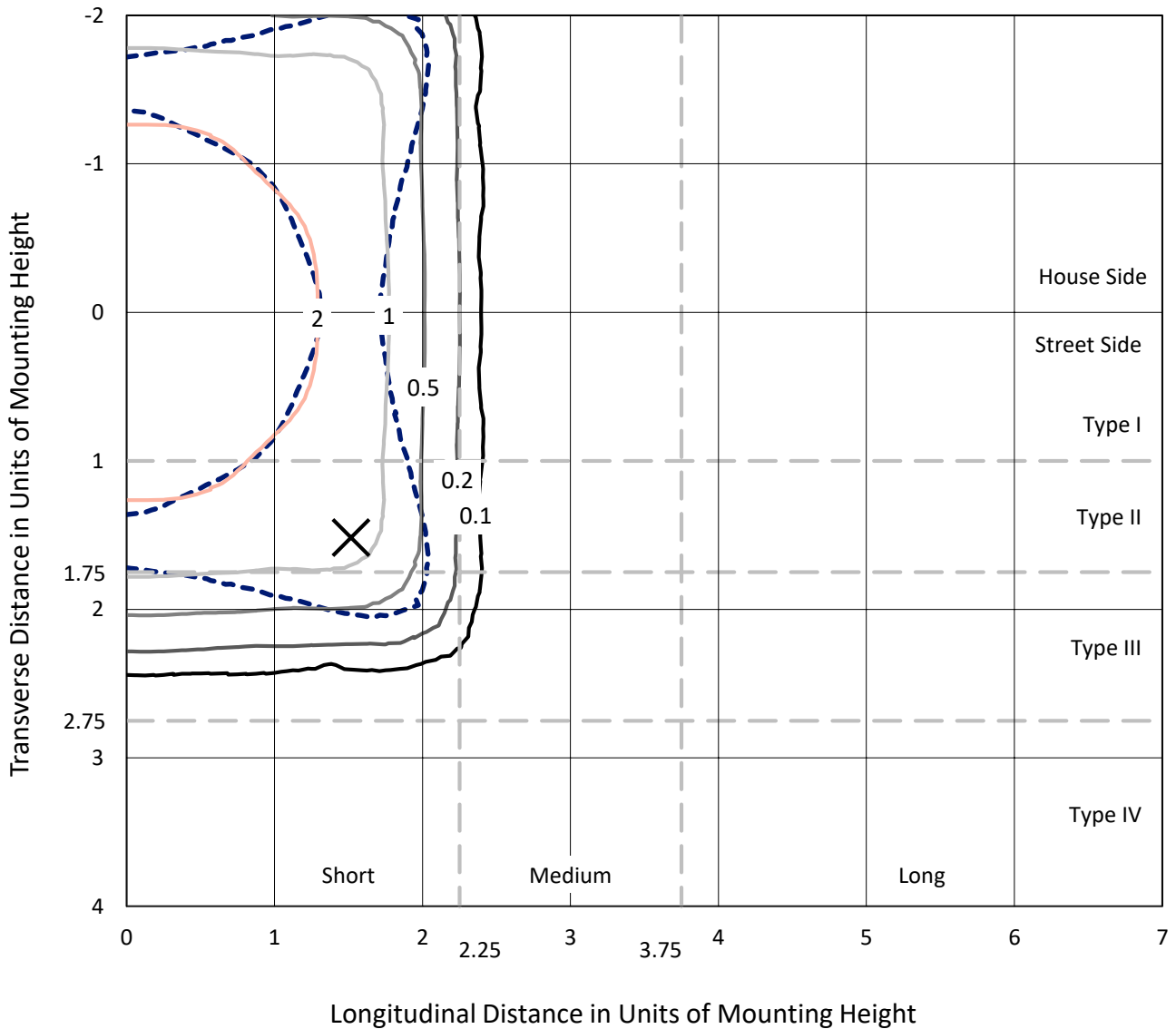


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Iso-Footcandle Lines of Horizontal Illumination

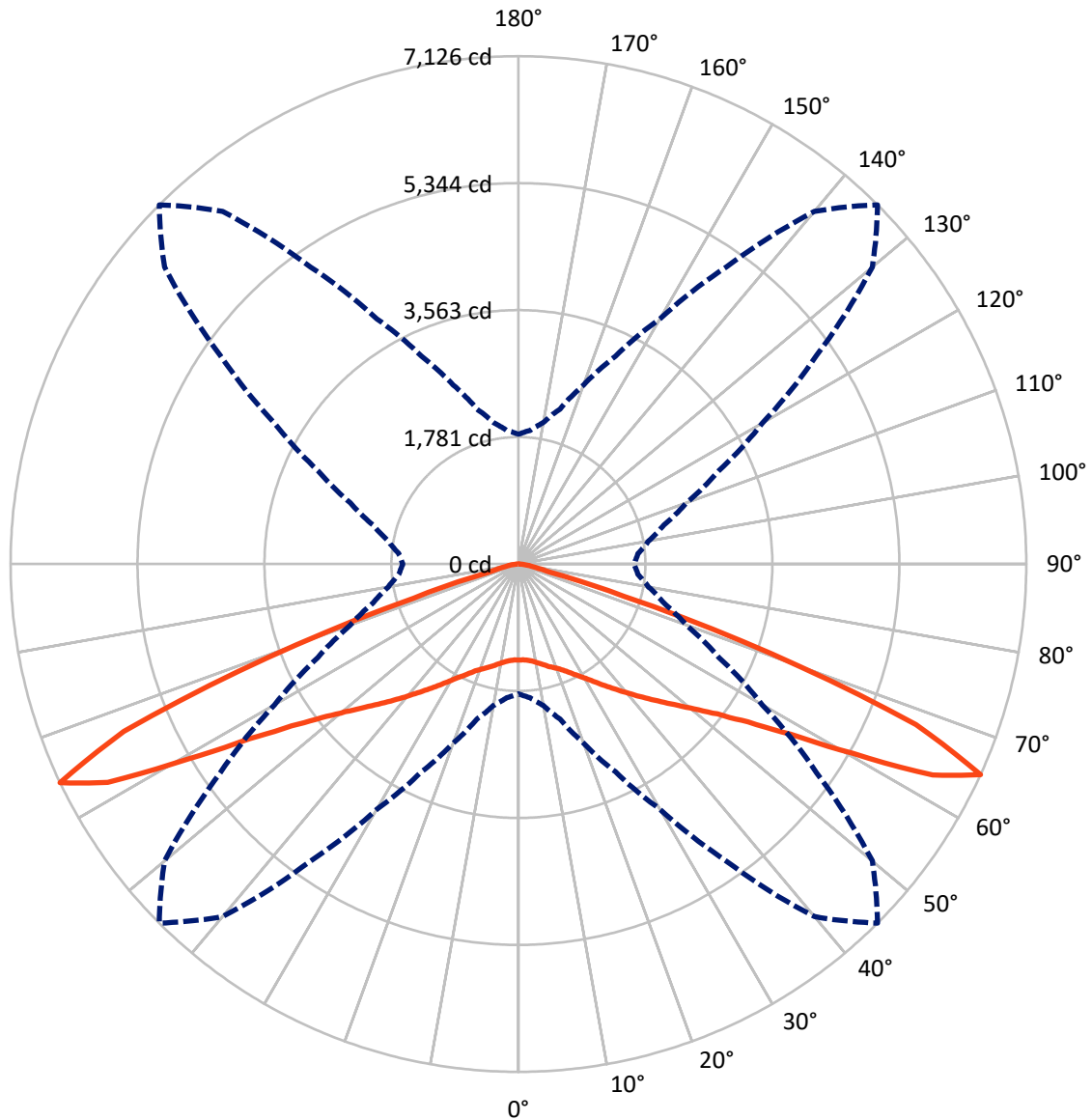
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.4 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5951.7	0.0	5951.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5951.7	0.0	5951.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	11903.4	0.0	11903.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.3	1.1
10°-20°	421.0	3.5
20°-30°	787.2	6.6
30°-40°	1331.5	11.2
40°-50°	2177.1	18.3
50°-60°	3461.9	29.1
60°-70°	3129.3	26.3
70°-80°	396.0	3.3
80°-90°	68.1	0.6
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°	11903.4	100.0
0°-180°	11903.4	100.0



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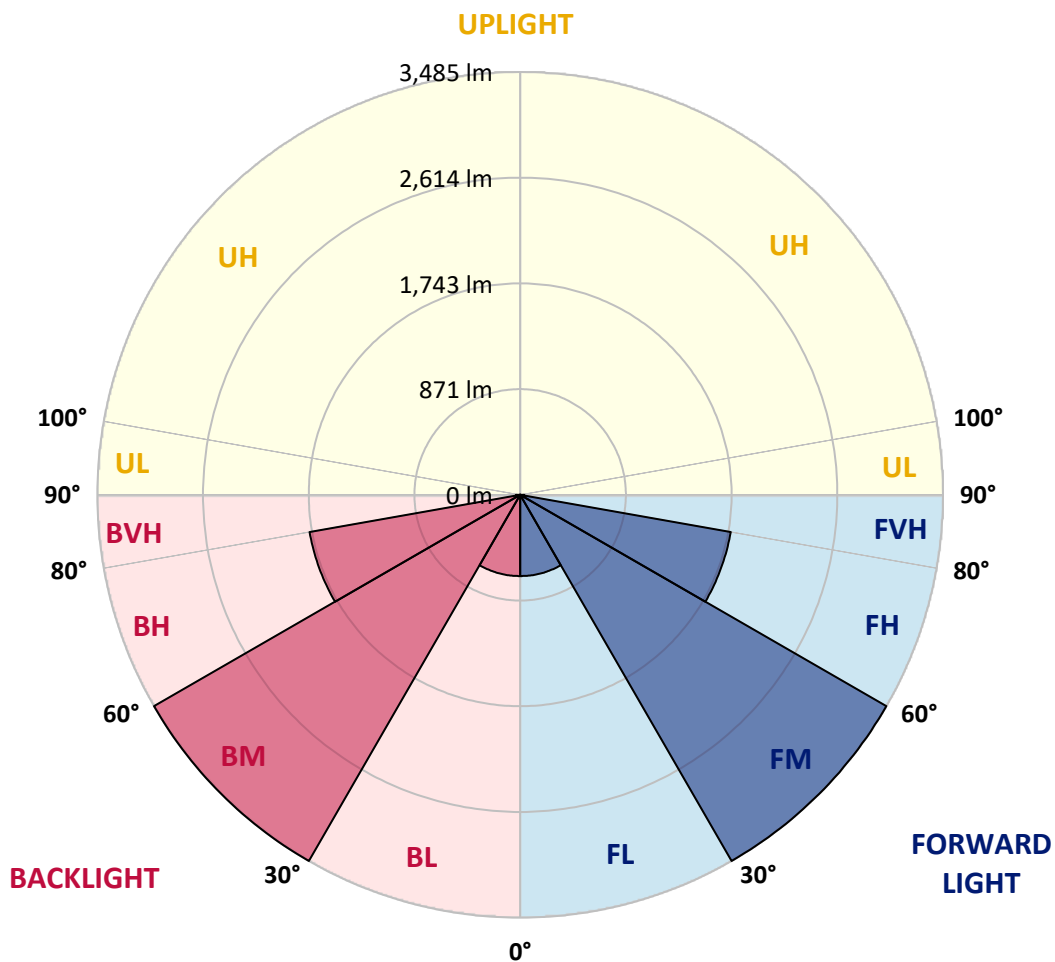
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	669.8	5.6			
FM	(30°-60°)	3485.2	29.3			
FH	(60°-80°)	1762.7	14.8			G1/1800
FVH	(80°-90°)	34.1	0.3			G1/100
BL	(0°-30°)	669.8	5.6	B2/1000		
BM	(30°-60°)	3485.2	29.3	B3/5000		
BH	(60°-80°)	1762.7	14.8	B3/2500		G1/1800
BVH	(80°-90°)	34.1	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9
2.5°	1348.0	1349.1	1350.2	1349.1	1350.2	1348.6	1347.4	1349.1	1347.4	1345.8	1346.9
5°	1359.7	1360.3	1360.3	1358.6	1360.3	1359.1	1357.5	1359.7	1358.0	1356.4	1357.5
7.5°	1379.2	1381.4	1379.8	1378.1	1379.2	1378.1	1377.0	1377.5	1377.0	1375.3	1375.9
10°	1405.4	1407.1	1406.0	1405.4	1406.5	1406.0	1404.9	1404.3	1404.9	1403.2	1403.2
12.5°	1437.2	1436.6	1436.1	1436.6	1438.3	1438.3	1437.8	1438.3	1439.4	1440.0	1438.9
15°	1468.4	1469.5	1469.5	1469.5	1472.9	1475.7	1477.3	1478.4	1480.7	1481.2	1479.0
17.5°	1507.4	1507.4	1506.9	1507.4	1510.8	1515.2	1516.9	1519.1	1521.4	1523.0	1520.3
20°	1550.9	1552.0	1552.0	1553.1	1557.6	1562.6	1562.6	1563.7	1562.6	1563.7	1562.1
22.5°	1603.9	1607.2	1607.2	1607.8	1612.2	1618.4	1616.7	1618.4	1615.6	1617.8	1615.6
25°	1673.0	1678.0	1676.9	1676.9	1680.3	1684.2	1684.7	1688.1	1687.5	1690.3	1688.6
27.5°	1751.1	1758.9	1761.1	1760.5	1762.8	1766.7	1767.8	1771.7	1769.5	1771.7	1770.6
30°	1844.7	1848.1	1852.5	1854.2	1857.0	1860.9	1860.9	1861.4	1858.7	1862.0	1863.7
32.5°	1941.7	1947.8	1952.3	1962.3	1967.4	1970.1	1969.6	1970.7	1967.9	1972.4	1975.7
35°	2069.9	2074.4	2081.6	2089.4	2096.1	2095.6	2093.9	2094.5	2094.5	2098.4	2101.7
37.5°	2224.4	2225.5	2235.0	2246.1	2249.4	2246.1	2236.1	2233.8	2228.8	2233.8	2239.4
40°	2387.7	2391.6	2410.6	2417.8	2419.5	2413.3	2398.9	2390.5	2379.3	2385.5	2393.3
42.5°	2558.9	2566.7	2583.9	2596.8	2602.3	2598.4	2578.4	2565.5	2551.0	2554.4	2562.2
45°	2748.4	2757.9	2782.4	2794.7	2805.3	2799.1	2779.6	2760.1	2737.2	2738.9	2751.2
47.5°	2960.2	2969.7	3001.5	3022.1	3027.7	3026.6	3004.8	2978.1	2946.9	2945.7	2956.3
50°	3197.7	3207.2	3246.8	3278.6	3294.7	3293.1	3267.4	3229.5	3191.6	3192.2	3205.5
52.5°	3429.6	3441.3	3482.6	3537.2	3569.0	3591.9	3576.3	3540.6	3494.3	3495.4	3507.7
55°	3647.1	3666.6	3714.0	3788.1	3847.2	3911.3	3929.7	3928.6	3900.7	3908.5	3920.8
57.5°	3752.4	3781.4	3854.4	3971.5	4091.9	4222.4	4332.8	4415.3	4450.4	4503.4	4491.1
60°	3552.8	3599.1	3706.7	3879.0	4117.0	4389.1	4680.6	4965.5	5208.6	5392.0	5286.6
62.5°	2909.0	2969.2	3099.6	3320.4	3680.5	4115.9	4673.9	5347.4	6081.0	6523.7	6207.6
65°	1820.2	1882.6	2015.3	2251.7	2673.1	3214.5	3971.5	5087.6	6458.4	7125.8	6482.4
67.5°	709.7	743.7	815.6	966.7	1283.3	1765.0	2524.8	3791.4	5431.0	6015.8	5330.1
70°	355.7	359.0	372.4	400.3	468.3	608.2	925.4	1757.7	3114.7	3761.9	3002.6
72.5°	257.0	257.6	264.2	276.5	298.3	329.5	389.7	538.0	1012.9	1548.1	949.4
75°	196.8	199.0	202.9	209.6	221.3	236.9	258.7	310.0	384.1	445.4	374.6
77.5°	151.6	156.1	158.9	165.0	172.3	182.9	189.0	208.5	242.5	255.3	251.4
80°	115.4	119.3	125.4	130.5	135.5	140.5	138.3	147.2	165.0	175.6	170.0
82.5°	73.6	78.0	95.9	100.3	102.6	105.9	102.0	102.6	110.4	117.1	110.4
85°	47.4	50.2	60.8	66.3	66.9	69.1	67.5	63.6	63.6	58.0	65.2
87.5°	21.7	22.3	27.3	32.3	33.4	30.1	29.5	28.4	22.9	21.7	23.4
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9
2.5°	1346.3	1347.4	1348.0	1349.7	1350.2	1350.2	1350.8	1351.9
5°	1356.9	1358.6	1359.1	1361.4	1361.9	1361.4	1362.5	1363.0
7.5°	1375.9	1378.7	1379.8	1382.0	1380.3	1382.6	1383.1	1383.1
10°	1403.7	1406.5	1407.1	1409.3	1408.2	1409.3	1409.3	1408.2
12.5°	1440.5	1441.1	1439.4	1441.1	1438.9	1440.0	1438.3	1437.2
15°	1481.2	1479.6	1475.7	1475.7	1472.3	1472.9	1472.3	1471.8
17.5°	1520.8	1517.5	1514.7	1513.6	1510.8	1510.2	1508.6	1508.6
20°	1564.3	1562.6	1561.0	1558.7	1555.9	1553.1	1552.6	1553.7
22.5°	1616.7	1616.1	1616.1	1615.0	1611.1	1608.3	1606.7	1606.7
25°	1686.9	1681.9	1681.9	1681.4	1679.7	1678.0	1674.7	1676.4
27.5°	1766.1	1763.3	1765.6	1765.0	1763.3	1763.3	1761.1	1761.1
30°	1863.7	1862.6	1865.9	1863.1	1857.5	1857.0	1854.7	1852.0
32.5°	1976.3	1975.2	1980.2	1976.8	1967.9	1962.9	1958.4	1956.2
35°	2101.7	2102.3	2108.4	2106.2	2096.1	2092.8	2085.0	2083.9
37.5°	2238.9	2247.8	2258.4	2260.6	2252.2	2250.0	2241.6	2237.2
40°	2400.0	2411.7	2427.8	2431.7	2422.8	2421.2	2409.4	2403.3
42.5°	2571.7	2591.7	2611.8	2615.2	2606.2	2597.3	2586.2	2581.7
45°	2763.4	2787.4	2813.6	2820.3	2806.9	2796.3	2781.8	2781.8
47.5°	2978.6	3008.7	3038.3	3056.7	3044.4	3033.3	3016.0	3004.8
50°	3232.8	3274.1	3312.6	3331.5	3312.0	3290.8	3260.7	3250.7
52.5°	3551.7	3596.3	3629.8	3619.7	3589.6	3560.1	3527.2	3513.8
55°	3958.7	3973.7	3973.7	3935.8	3875.6	3826.0	3774.2	3756.9
57.5°	4467.7	4409.7	4320.5	4207.3	4065.2	3941.4	3857.8	3818.2
60°	5065.9	4787.1	4472.1	4162.7	3908.5	3698.9	3574.6	3517.7
62.5°	5464.5	4735.3	4104.2	3607.5	3241.8	2989.2	2817.5	2750.6
65°	5107.1	3949.2	3104.1	2509.8	2111.2	1854.2	1684.2	1621.7
67.5°	3740.7	2474.7	1652.9	1184.7	868.0	692.4	622.7	593.7
70°	1679.1	871.3	534.1	417.0	359.6	330.0	317.2	312.7
72.5°	506.2	366.3	308.8	278.7	255.9	241.4	230.8	229.7
75°	305.5	254.2	225.8	207.9	193.4	181.7	176.2	174.5
77.5°	213.5	186.8	173.4	160.6	149.4	140.5	135.5	131.6
80°	150.0	137.1	131.0	123.8	116.5	108.2	100.9	97.6
82.5°	100.3	97.6	97.6	93.1	87.0	79.2	64.7	61.3
85°	64.7	64.1	65.2	63.6	59.1	50.7	41.8	39.6
87.5°	30.1	30.7	34.0	33.4	32.3	26.8	21.2	20.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)