

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: P299884

Luminaire Tested: **GLNA-AF-02-LED-E1-5WQ-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299884
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)
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-E1-5WQ-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10327 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 85
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

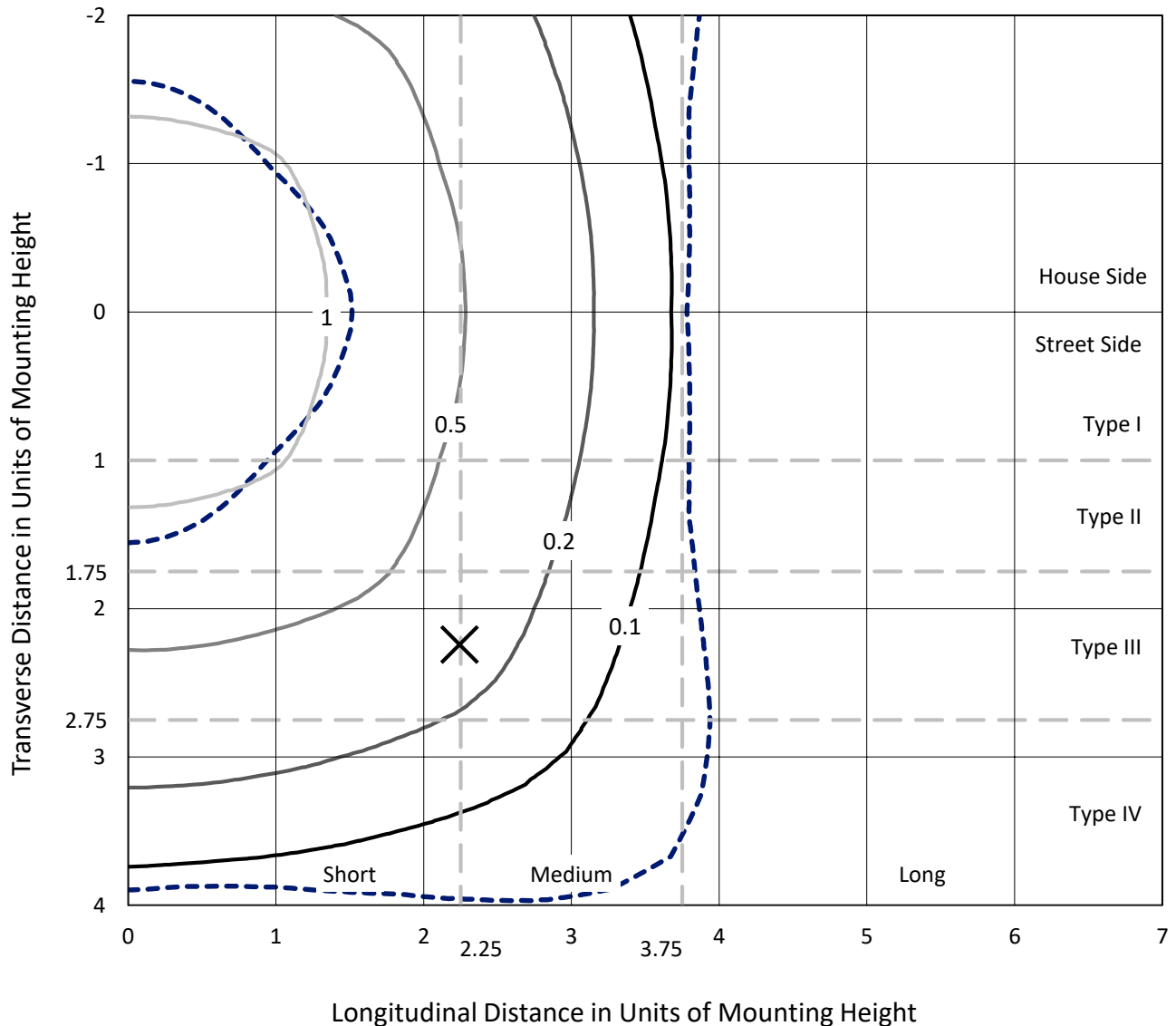


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

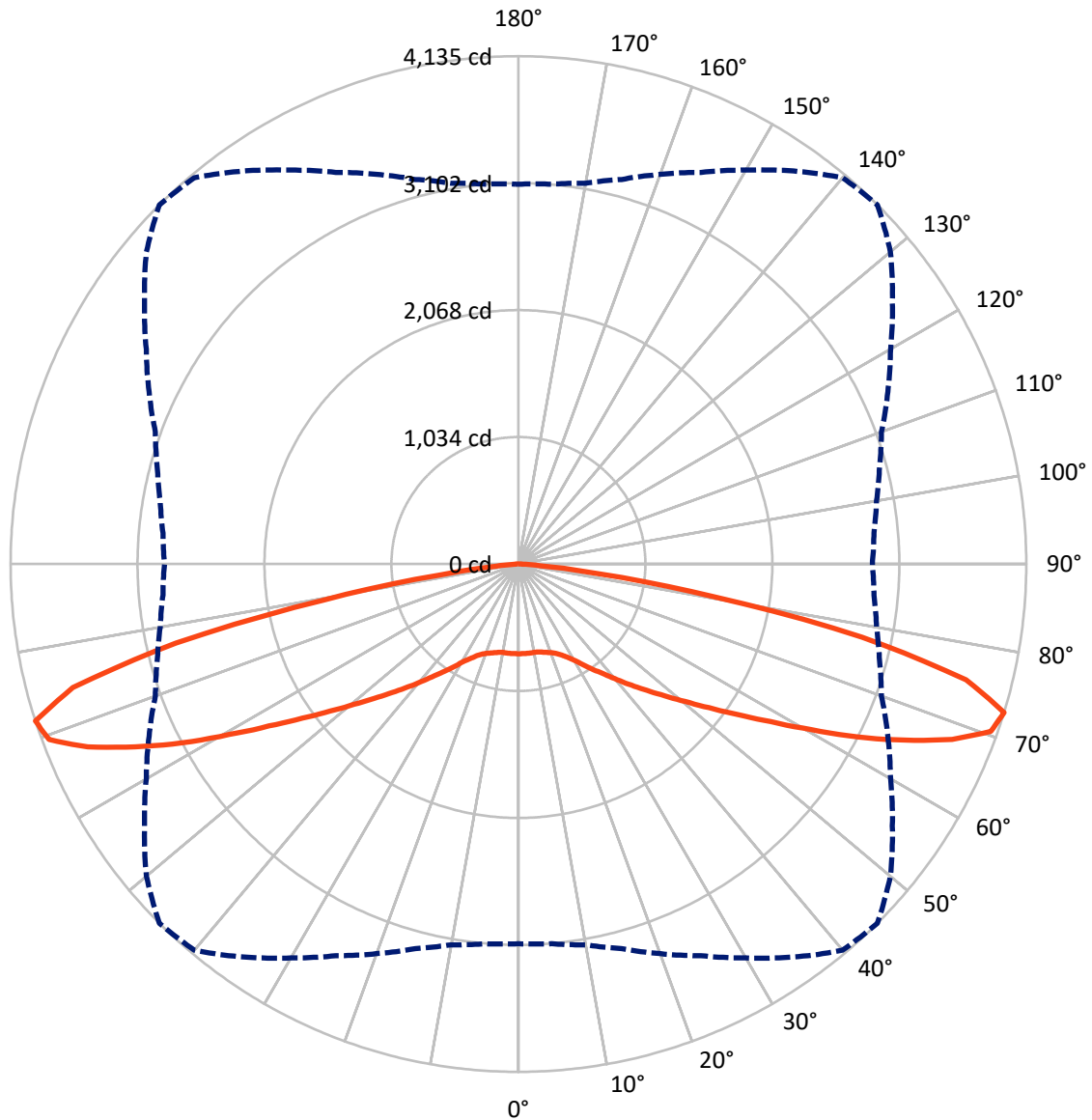


Based on 20 foot mounting height. Maximum calculated value = 1.8 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5163.5	0.0	5163.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5163.5	0.0	5163.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	10327.0	0.0	10327.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.8	0.7
10°-20°	212.1	2.1
20°-30°	387.6	3.8
30°-40°	668.2	6.5
40°-50°	1142.3	11.1
50°-60°	1851.6	17.9
60°-70°	3071.7	29.7
70°-80°	2705.5	26.2
80°-90°	218.1	2.1
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°	10327.0	100.0
0°-180°	10327.0	100.0



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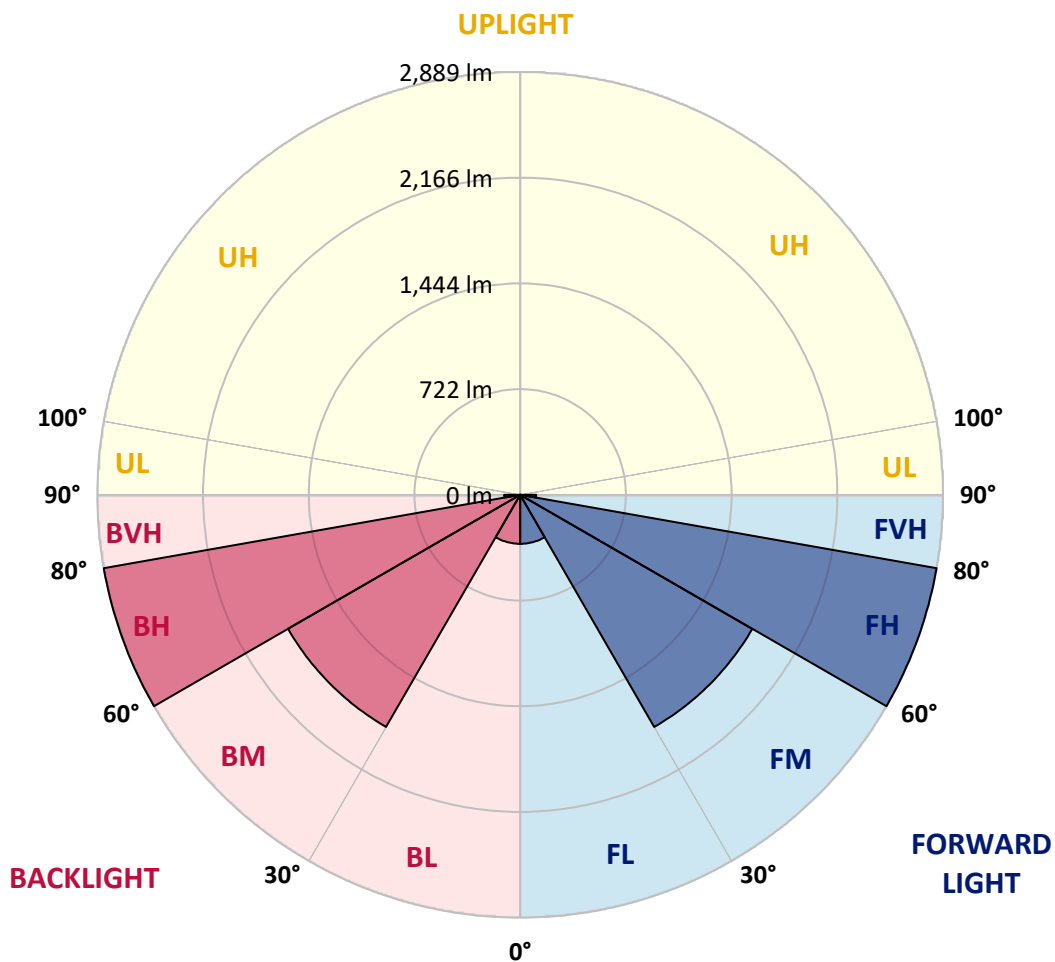
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	334.7	3.2			
FM	(30°-60°)	1831.1	17.7			
FH	(60°-80°)	2888.6	28.0			G2/5000
FVH	(80°-90°)	109.1	1.1			G2/225
BL	(0°-30°)	334.7	3.2	B1/500		
BM	(30°-60°)	1831.1	17.7	B2/2500		
BH	(60°-80°)	2888.6	28.0	B4/5000		G2/5000
BVH	(80°-90°)	109.1	1.1			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	731.3	731.3	731.3	731.3	731.3	731.3	731.3	731.3	731.3	731.3	731.3
2.5°	731.3	731.8	732.3	731.8	731.8	731.3	730.8	731.3	730.8	729.9	730.4
5°	733.7	734.6	734.6	733.7	734.2	733.7	732.7	733.2	732.3	730.8	730.8
7.5°	736.5	737.0	737.0	736.0	736.5	735.6	734.6	734.2	733.2	731.3	729.9
10°	740.8	741.3	740.8	739.8	739.8	738.4	736.0	735.1	733.2	730.4	728.9
12.5°	745.5	746.0	745.5	744.6	744.1	741.7	739.8	738.4	737.0	734.6	732.3
15°	752.2	753.1	752.2	750.3	748.8	746.9	746.0	746.5	746.9	745.0	742.7
17.5°	764.5	764.9	763.5	759.3	757.4	755.5	755.5	756.4	757.8	756.9	754.5
20°	787.2	785.8	782.5	777.3	774.9	771.6	771.1	771.6	771.6	771.1	769.2
22.5°	815.6	814.7	810.4	803.8	800.5	798.6	795.7	793.4	792.9	791.5	789.6
25°	849.7	849.2	844.0	838.4	836.0	833.6	831.3	827.9	825.1	821.8	819.9
27.5°	893.3	891.4	883.8	881.0	877.7	876.2	872.9	869.1	866.8	862.5	860.1
30°	941.1	941.1	935.0	934.0	934.0	930.7	926.9	920.3	916.0	911.8	910.3
32.5°	989.0	989.4	983.3	985.2	986.6	989.0	989.9	987.6	984.7	984.2	981.4
35°	1058.1	1056.2	1050.1	1051.5	1051.0	1050.5	1050.5	1055.8	1056.7	1057.7	1052.0
37.5°	1143.9	1143.9	1137.7	1137.7	1134.9	1132.0	1128.2	1131.5	1136.8	1138.2	1134.4
40°	1241.9	1245.2	1237.6	1237.2	1238.1	1229.1	1224.9	1230.1	1233.4	1239.1	1234.8
42.5°	1357.5	1355.1	1347.5	1346.6	1341.4	1338.5	1334.7	1339.0	1344.2	1348.0	1349.4
45°	1468.3	1466.4	1457.9	1457.9	1452.7	1450.3	1452.2	1459.3	1461.7	1466.9	1472.1
47.5°	1577.7	1575.4	1569.7	1572.0	1572.5	1576.8	1582.9	1589.6	1596.2	1603.3	1605.7
50°	1689.5	1690.0	1683.8	1689.5	1696.6	1708.4	1725.0	1735.9	1749.7	1758.7	1761.5
52.5°	1791.3	1793.2	1799.9	1813.1	1827.3	1850.5	1879.0	1905.5	1928.2	1943.4	1942.4
55°	1913.5	1916.4	1932.5	1955.2	1978.4	2013.5	2055.6	2102.5	2140.4	2162.2	2148.5
57.5°	2069.8	2076.0	2094.0	2124.8	2159.4	2204.8	2262.6	2333.2	2391.9	2421.3	2399.0
60°	2284.4	2288.2	2310.0	2344.1	2385.8	2442.1	2519.3	2614.1	2696.9	2735.8	2710.2
62.5°	2567.2	2574.3	2591.8	2626.4	2669.0	2732.9	2827.2	2945.6	3048.9	3102.9	3045.1
65°	2904.9	2927.6	2942.3	2977.3	3017.1	3084.9	3183.4	3310.3	3421.2	3456.7	3389.9
67.5°	3239.3	3259.2	3284.7	3325.0	3365.3	3441.5	3532.9	3656.1	3777.8	3810.0	3706.3
70°	3385.6	3397.0	3436.8	3491.7	3568.9	3658.9	3764.5	3902.9	4053.5	4080.0	3948.3
72.5°	3092.4	3103.8	3148.3	3241.6	3376.2	3519.2	3703.4	3906.6	4105.6	4135.4	3954.0
75°	2338.9	2320.4	2386.2	2509.9	2691.3	2890.7	3148.3	3439.6	3727.1	3764.5	3548.1
77.5°	1208.7	1206.4	1256.1	1409.6	1626.0	1852.9	2136.6	2465.8	2747.2	2860.8	2684.6
80°	340.6	344.3	368.0	444.3	570.7	734.6	956.3	1264.6	1494.8	1612.3	1513.8
82.5°	133.6	144.0	153.0	167.2	183.8	207.9	277.6	413.0	554.2	662.2	542.3
85°	47.8	51.2	72.5	85.7	87.2	91.9	104.7	122.2	147.3	175.7	144.5
87.5°	18.0	19.9	23.2	38.4	37.9	34.6	42.2	44.0	33.2	30.3	37.4
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°	731.3	731.3	731.3	731.3	731.3	731.3	731.3	731.3
2.5°	729.4	729.9	729.9	730.4	730.8	730.8	731.8	731.8
5°	729.9	729.9	728.9	729.4	728.9	728.9	729.4	729.4
7.5°	728.9	728.5	727.5	727.0	726.1	726.1	726.1	726.1
10°	727.5	727.0	726.1	725.6	725.2	725.2	725.2	725.2
12.5°	731.3	729.9	728.9	728.5	728.5	728.5	728.5	728.5
15°	741.3	737.9	735.6	735.6	736.0	737.0	737.0	737.9
17.5°	753.6	749.8	747.4	745.5	746.5	747.9	748.8	749.8
20°	768.3	766.4	763.0	761.2	761.2	763.0	764.0	764.5
22.5°	788.6	787.2	785.8	783.4	783.4	784.4	786.3	786.3
25°	818.9	818.0	817.0	815.1	814.7	814.7	815.6	816.6
27.5°	856.8	857.3	856.4	855.9	854.5	854.0	855.4	854.9
30°	907.5	909.9	912.2	910.3	908.0	906.6	905.1	903.2
32.5°	976.2	973.3	971.5	968.1	963.9	960.1	957.2	953.9
35°	1041.1	1036.3	1034.4	1037.3	1036.8	1034.4	1031.1	1028.3
37.5°	1120.6	1119.7	1120.6	1125.9	1124.9	1127.3	1120.6	1120.2
40°	1221.1	1222.0	1228.6	1234.8	1238.1	1241.4	1237.6	1233.9
42.5°	1337.6	1337.1	1339.5	1348.0	1353.7	1357.5	1349.4	1348.5
45°	1460.7	1457.4	1459.3	1466.4	1472.1	1476.4	1467.4	1467.4
47.5°	1596.2	1590.5	1584.3	1592.4	1595.7	1598.6	1591.5	1589.1
50°	1747.3	1735.4	1722.2	1725.5	1725.5	1724.5	1715.5	1715.1
52.5°	1920.6	1898.9	1874.7	1865.7	1860.5	1854.8	1839.2	1831.6
55°	2120.0	2087.4	2049.5	2026.3	2013.9	1998.3	1972.3	1965.2
57.5°	2353.1	2301.9	2236.6	2208.1	2180.7	2155.1	2126.2	2118.1
60°	2629.2	2553.9	2467.2	2414.7	2384.8	2360.2	2330.3	2328.9
62.5°	2937.1	2818.2	2720.2	2672.8	2651.0	2629.2	2600.8	2604.6
65°	3250.2	3126.1	3034.2	2995.8	2975.5	2957.5	2929.0	2933.3
67.5°	3559.0	3444.8	3343.9	3304.6	3281.9	3259.2	3233.6	3237.9
70°	3780.7	3639.0	3525.4	3438.2	3383.7	3322.2	3282.4	3272.4
72.5°	3717.2	3498.8	3318.4	3145.5	3044.1	2961.7	2905.8	2881.7
75°	3217.0	2918.6	2686.5	2474.3	2355.0	2257.9	2187.3	2143.3
77.5°	2389.1	2053.7	1779.5	1535.1	1341.8	1212.1	1120.6	1061.4
80°	1307.7	994.7	727.0	511.1	375.6	312.1	275.7	258.1
82.5°	407.3	262.9	193.7	167.2	155.4	148.7	137.8	120.3
85°	129.8	113.7	105.6	100.9	96.2	83.8	57.8	52.6
87.5°	50.2	51.6	51.2	48.3	49.3	35.5	28.4	25.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)