

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: P302877

Luminaire Tested: **GLNA-AF-10-LED-E1-T4W-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P302877
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191569)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-10-LED-E1-T4W-7030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45563.5 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G5

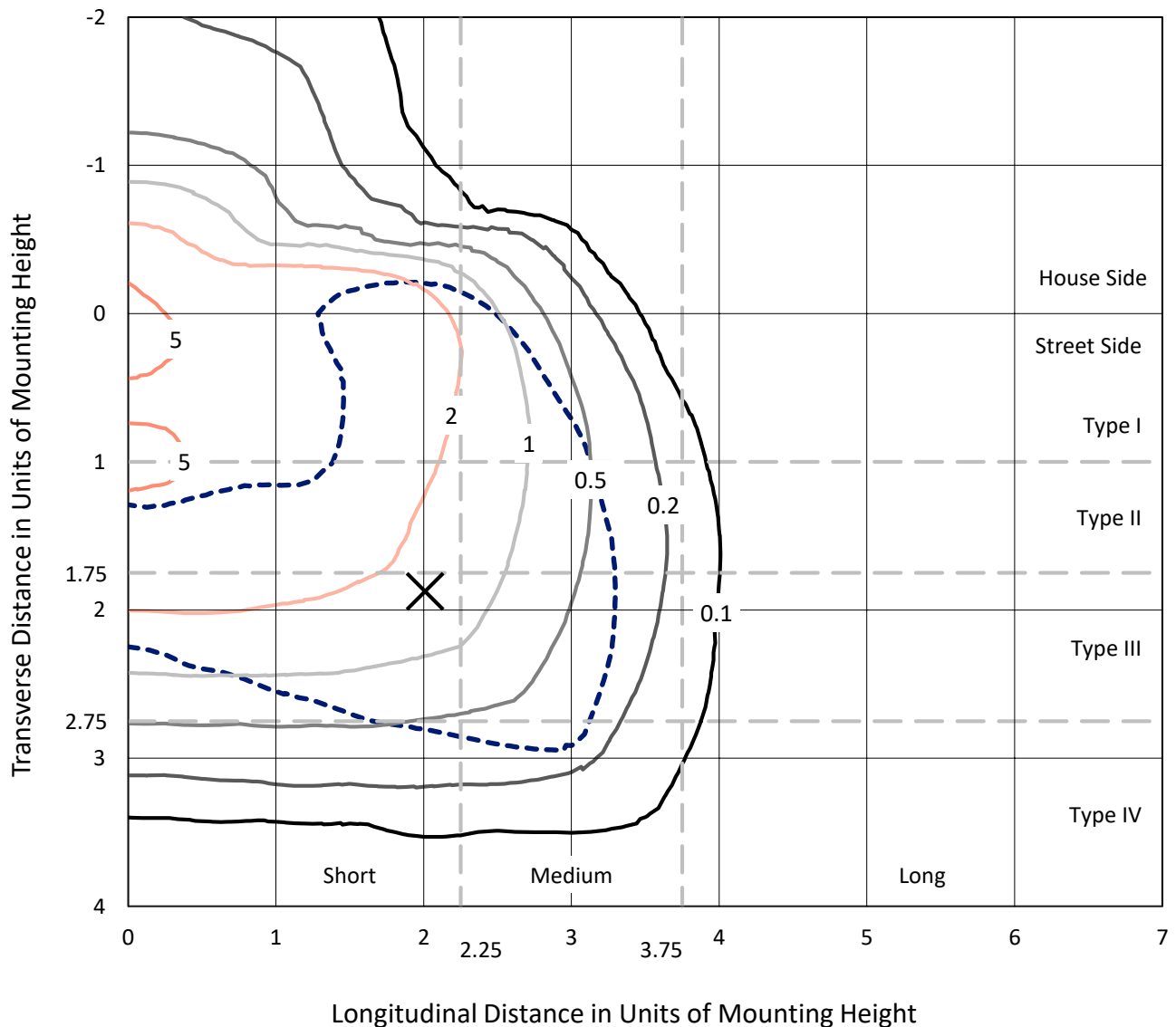
Input Watts (W): 419
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P302877
 CATALOG NUMBER: GLNA-AF-10-LED-E1-T4W-7030-800

Iso-Footcandle Lines of Horizontal Illumination

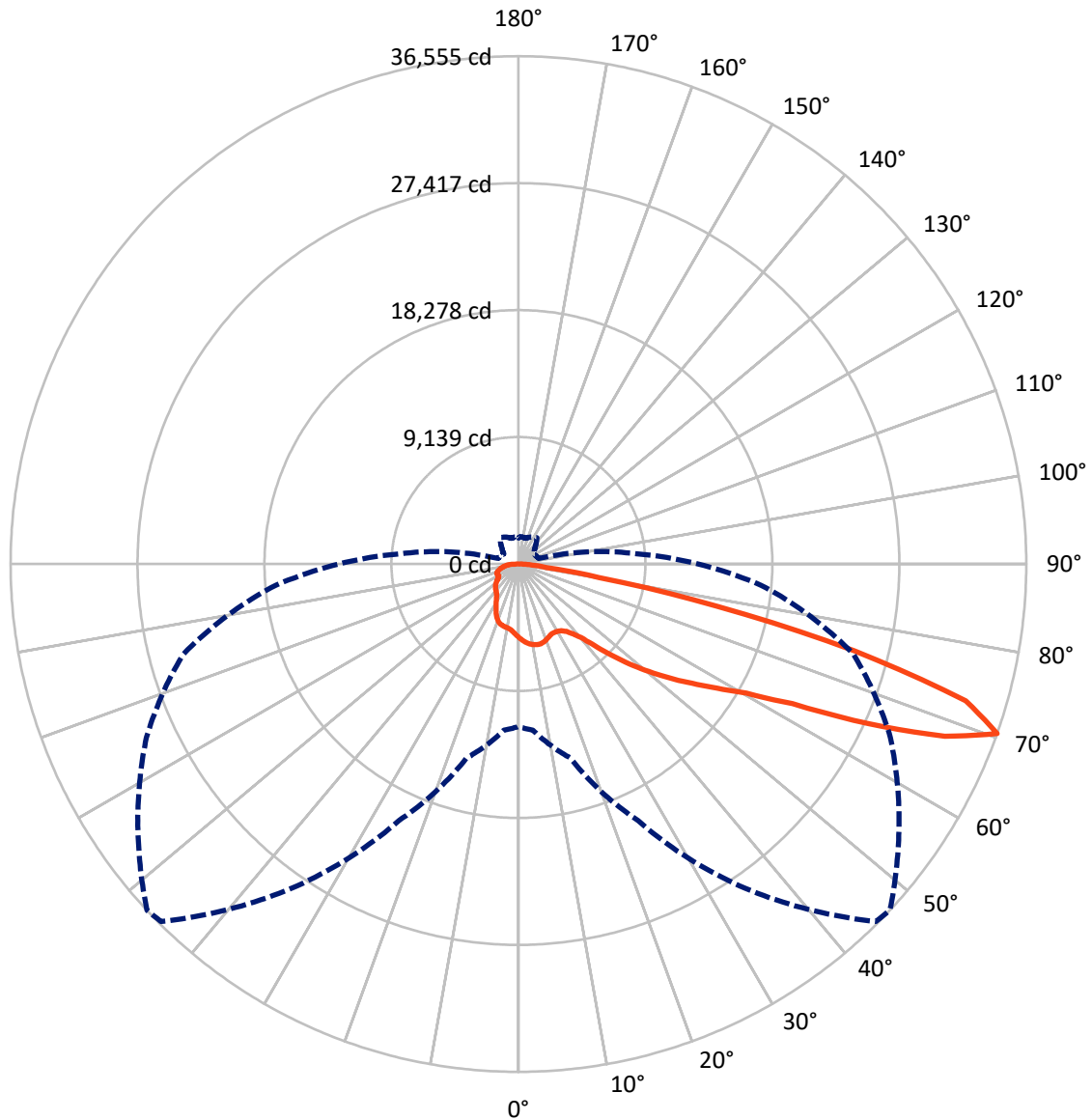
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.8 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P302877
CATALOG NUMBER: GLNA-AF-10-LED-E1-T4W-7030-800

Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P302877

CATALOG NUMBER: GLNA-AF-10-LED-E1-T4W-7030-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9505.5	0.0	9505.5
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	36058.1	0.0	36058.1
	% Fixture	79.1	0.0	79.1
Total	Lumens	45563.5	0.0	45563.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	506.6	1.1
10°-20°	1486.1	3.3
20°-30°	2194.6	4.8
30°-40°	3189.8	7.0
40°-50°	5740.5	12.6
50°-60°	9944.9	21.8
60°-70°	14194.3	31.2
70°-80°	7286.5	16.0
80°-90°	1020.1	2.2
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°	45563.5	100.0
0°-180°	45563.5	100.0



REPORT NUMBER: P302877

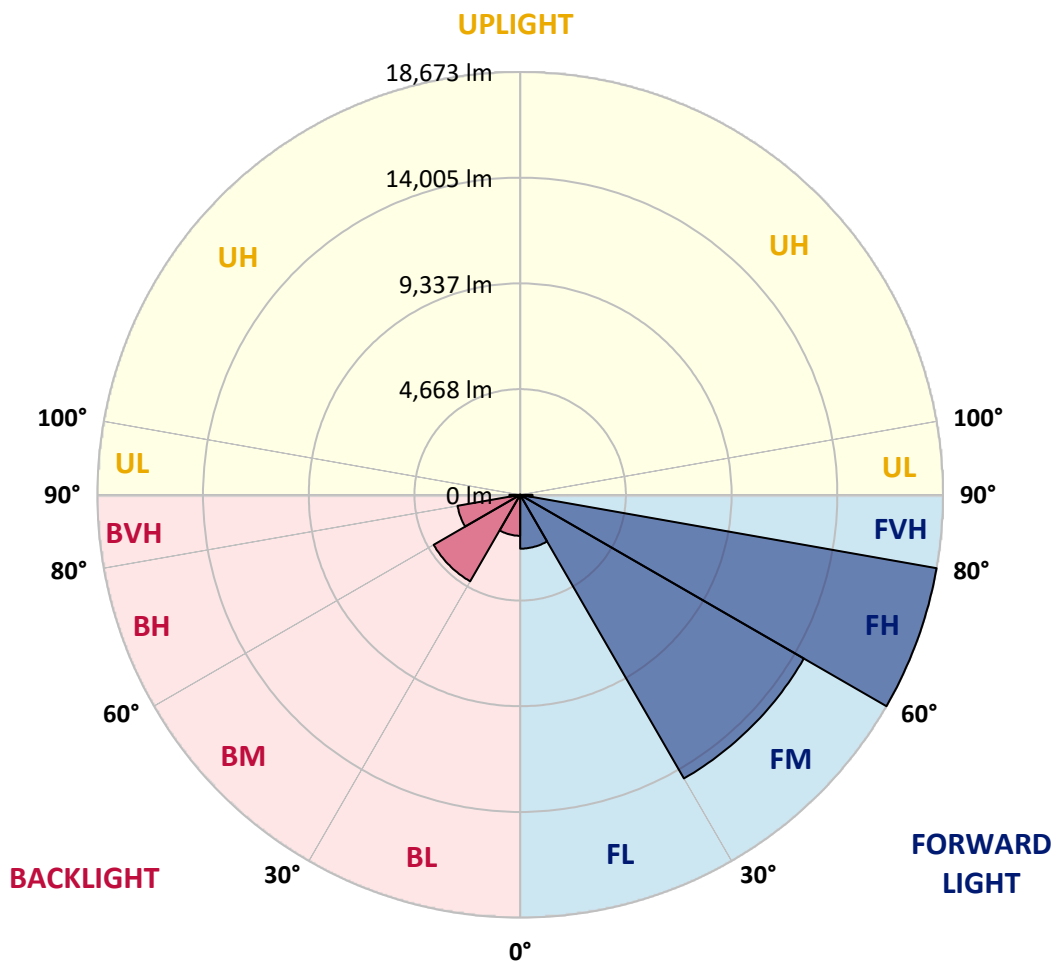
CATALOG NUMBER: GLNA-AF-10-LED-E1-T4W-7030-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2377.4	5.2			
FM	(30°-60°)	14463.1	31.7			
FH	(60°-80°)	18673.2	41.0			G5
FVH	(80°-90°)	544.4	1.2			G4/750
BL	(0°-30°)	1809.9	4.0	B3/2500		
BM	(30°-60°)	4412.1	9.7	B3/5000		
BH	(60°-80°)	2807.7	6.2	B4/5000		G4/5000
BVH	(80°-90°)	475.8	1.0			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Short





REPORT NUMBER: P302877

CATALOG NUMBER: GLNA-AF-10-LED-E1-T4W-7030-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	5286.7	5286.7	5286.7	5286.7	5286.7	5286.7	5286.7	5286.7	5286.7	5286.7	5286.7
2.5°	5597.3	5586.3	5581.9	5573.1	5562.0	5506.1	5495.0	5455.3	5400.0	5341.9	5282.3
5°	5965.4	5963.2	5938.2	5894.0	5823.4	5701.2	5672.4	5575.3	5444.2	5317.6	5191.7
7.5°	6288.6	6268.8	6222.4	6133.3	6009.6	5843.2	5803.5	5668.0	5488.4	5315.4	5144.6
10°	6525.7	6514.7	6413.1	6290.8	6128.9	5944.8	5898.5	5747.5	5550.2	5330.8	5118.1
12.5°	6661.2	6639.1	6521.3	6375.5	6182.6	6003.0	5955.9	5803.5	5581.9	5330.8	5080.5
15°	6652.3	6636.9	6519.1	6359.3	6165.0	6007.4	5965.4	5812.3	5575.3	5308.8	5031.9
17.5°	6474.9	6481.5	6382.1	6224.6	6064.8	5944.8	5907.3	5765.9	5530.4	5264.6	4974.5
20°	6165.0	6195.9	6128.9	5989.7	5900.7	5818.9	5794.6	5674.6	5461.9	5200.5	4911.9
22.5°	5854.3	5883.0	5856.5	5738.7	5725.4	5676.9	5663.6	5577.5	5402.3	5160.8	4874.4
25°	5626.1	5652.6	5648.1	5545.8	5586.3	5584.1	5573.1	5530.4	5389.0	5160.8	4881.0
27.5°	5564.2	5573.1	5564.2	5470.7	5525.9	5570.8	5562.0	5554.6	5428.8	5224.8	4965.7
30°	5777.0	5763.7	5694.5	5506.1	5557.6	5619.4	5610.6	5615.0	5548.0	5393.4	5154.2
32.5°	6625.8	6565.5	6348.3	5818.9	5683.5	5716.6	5721.0	5794.6	5805.7	5652.6	5446.4
35°	7895.8	7829.5	7547.5	6656.7	6075.9	5961.0	5961.0	6071.5	6137.7	6025.1	5900.7
37.5°	9241.5	9167.9	9017.7	7818.5	6900.4	6384.3	6373.3	6450.6	6545.6	6572.8	6603.7
40°	10770.6	10693.3	10735.3	9121.5	8051.1	7117.6	6960.1	6904.8	7161.8	7332.6	7581.4
42.5°	12444.8	12408.7	12424.2	10573.3	9360.8	8215.3	7991.5	7705.1	8015.8	8319.1	8840.3
45°	13993.7	14024.7	14009.2	12127.5	10820.0	9553.7	9316.6	8762.3	9066.3	9586.8	10436.4
47.5°	15350.6	15221.7	15421.2	13825.1	12453.6	11052.6	10759.6	10017.5	10325.2	10967.9	12404.3
50°	16997.4	16979.8	16687.5	16091.2	14428.1	12557.4	12173.8	11314.0	11792.5	12686.2	14885.3
52.5°	18729.0	18407.3	18139.3	17852.9	16523.3	14100.5	13630.1	12606.0	13517.4	14640.9	17908.9
55°	19083.1	18939.5	19271.6	19753.0	18542.7	15703.2	15155.5	14226.4	15459.5	16876.0	21395.5
57.5°	19841.4	19839.2	20526.8	21384.5	20621.8	17403.1	16850.9	16183.9	17642.4	19435.7	25097.1
60°	20353.8	20497.3	21774.7	23439.2	22663.3	19367.3	18859.3	18442.6	20125.6	22297.4	28546.2
62.5°	20621.8	20816.9	22559.5	24272.6	25549.2	22636.8	22129.5	21528.8	23410.5	25436.5	30563.4
65°	19507.2	19890.0	22437.2	24993.3	28076.6	27936.7	27708.4	26653.5	27517.8	27916.8	29834.6
67.5°	16421.0	16813.4	19779.5	24321.2	29881.0	33048.9	33097.5	31295.2	30045.2	28129.6	25083.9
70°	11699.7	12007.5	14462.0	20391.3	28506.5	36389.0	36555.4	33433.9	29541.6	24946.2	17525.3
72.5°	5554.6	5743.1	8066.6	13271.5	22621.3	33341.1	33662.9	30703.3	25119.2	18469.1	9560.3
75°	2041.5	2098.9	2726.2	5645.9	13120.6	24587.7	24966.8	22009.5	16651.4	9195.2	3642.0
77.5°	1223.6	1261.1	1529.8	2383.1	5160.8	14054.1	14614.4	11969.9	7277.4	3422.6	1791.2
80°	855.5	882.0	1096.9	1482.7	2438.3	5355.9	5854.3	4885.4	2899.2	2165.9	1303.1
82.5°	578.7	591.9	771.5	1002.0	1620.4	1912.7	2063.6	2172.5	1955.4	1611.5	826.8
85°	379.1	392.4	523.4	660.4	1030.7	988.7	1010.8	1278.8	1427.5	1094.7	458.7
87.5°	217.2	226.0	315.1	352.6	505.8	418.9	423.3	673.6	913.6	738.4	279.0
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: P302877

CATALOG NUMBER: GLNA-AF-10-LED-E1-T4W-7030-800

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5286.7	5286.7	5286.7	5286.7	5286.7	5286.7	5286.7	5286.7	5286.7	5286.7	5286.7
2.5°	5266.8	5238.1	5174.0	5133.5	5096.0	5087.2	5071.7	5069.5	5067.3	5067.3	5060.7
5°	5149.0	5100.4	5001.0	4945.1	4898.7	4894.3	4892.1	4903.1	4907.5	4911.9	4905.3
7.5°	5073.9	5007.6	4883.2	4803.7	4748.5	4734.5	4757.3	4808.1	4841.3	4854.5	4847.9
10°	5027.5	4945.1	4801.5	4714.6	4668.3	4661.6	4690.3	4750.7	4819.2	4845.7	4843.5
12.5°	4974.5	4881.0	4727.9	4637.3	4610.8	4624.1	4661.6	4716.8	4788.3	4830.2	4832.4
15°	4920.8	4812.6	4655.0	4575.5	4564.5	4582.1	4617.5	4659.4	4714.6	4757.3	4761.8
17.5°	4856.7	4743.4	4586.5	4504.1	4495.3	4504.1	4506.3	4528.4	4564.5	4604.2	4615.3
20°	4788.3	4672.7	4508.5	4426.8	4387.0	4351.7	4311.2	4315.6	4326.7	4367.2	4376.0
22.5°	4738.9	4624.1	4448.9	4335.5	4229.5	4122.7	4043.2	4032.2	4036.6	4069.7	4080.8
25°	4743.4	4621.9	4433.4	4238.3	4005.7	3834.9	3728.1	3710.5	3708.3	3732.5	3748.7
27.5°	4830.2	4708.0	4490.8	4138.2	3762.0	3508.7	3396.1	3382.9	3365.2	3371.8	3389.5
30°	5023.1	4909.7	4630.7	4036.6	3497.7	3190.0	3072.2	3058.9	3034.6	3023.6	3036.8
32.5°	5337.5	5244.7	4834.6	3938.7	3234.1	2916.8	2797.6	2768.9	2753.4	2740.1	2751.2
35°	5860.9	5821.2	5107.0	3832.7	3001.5	2706.3	2598.1	2553.9	2531.8	2556.1	2573.8
37.5°	6681.0	6703.1	5464.1	3666.3	2821.9	2567.1	2475.8	2425.1	2391.9	2411.8	2431.7
40°	7842.8	7858.2	5858.7	3431.4	2666.5	2484.7	2387.5	2341.1	2294.0	2258.7	2256.5
42.5°	9367.4	9210.6	6246.7	3176.7	2486.9	2433.9	2325.7	2267.5	2196.8	2098.9	2079.0
45°	11176.3	10624.9	6541.2	2883.7	2285.2	2372.0	2256.5	2177.0	2065.8	1959.8	1948.7
47.5°	13260.5	12142.9	6685.5	2580.4	2096.7	2280.8	2172.5	2045.9	1906.0	1853.0	1846.4
50°	15804.8	13945.1	6753.9	2285.2	1933.3	2161.5	2050.3	1901.6	1784.6	1773.5	1766.9
52.5°	18702.5	16113.3	6776.7	2043.7	1797.8	2006.2	1950.9	1806.6	1713.1	1722.7	1722.7
55°	21734.9	18352.1	6474.9	1868.5	1673.4	1846.4	1883.9	1769.1	1691.1	1727.1	1740.4
57.5°	24518.5	20336.1	5525.9	1733.8	1556.3	1724.9	1859.6	1804.4	1751.4	1895.0	1903.8
60°	26655.7	21508.2	4127.2	1611.5	1469.5	1682.2	1924.4	1939.9	1953.1	2296.2	2343.3
62.5°	27103.3	21118.7	2837.3	1516.6	1429.7	1718.3	2041.5	2043.7	2028.2	2267.5	2296.2
65°	25048.6	18651.0	2063.6	1462.8	1396.6	1782.3	2141.6	2094.5	1992.9	2174.7	2121.0
67.5°	19892.2	14051.9	1718.3	1423.1	1348.0	1777.9	2247.6	2141.6	1973.0	2130.6	2043.7
70°	12912.3	8496.5	1529.8	1390.0	1289.8	1693.3	2309.5	2137.2	1914.9	1981.9	1879.5
72.5°	6299.7	3799.5	1403.2	1341.4	1230.2	1576.2	2307.3	2096.7	1855.2	1850.8	1795.6
75°	2464.8	1740.4	1287.6	1267.7	1128.6	1443.0	2245.4	2039.3	1784.6	1713.1	1693.3
77.5°	1443.0	1241.2	1141.8	1159.5	1006.4	1309.7	2154.9	1939.9	1686.6	1602.7	1580.6
80°	1050.6	929.1	973.3	1002.0	859.9	1177.2	2032.7	1817.7	1578.4	1620.4	1589.5
82.5°	673.6	598.5	789.2	817.9	716.3	1041.7	1899.4	1688.8	1425.3	1294.2	1263.3
85°	343.8	379.1	587.5	622.8	552.2	855.5	1738.2	1518.8	1252.3	1077.1	1094.7
87.5°	192.9	259.1	374.7	418.9	390.2	658.2	1409.8	1252.3	1021.8	831.2	731.8
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)