

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: P299200

Luminaire Tested: **GLNA-AF-08-LED-E1-T3-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299200
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-08-LED-E1-T3-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38415 lumens
Efficiency: N/A
Efficacy: 115.0 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 334
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

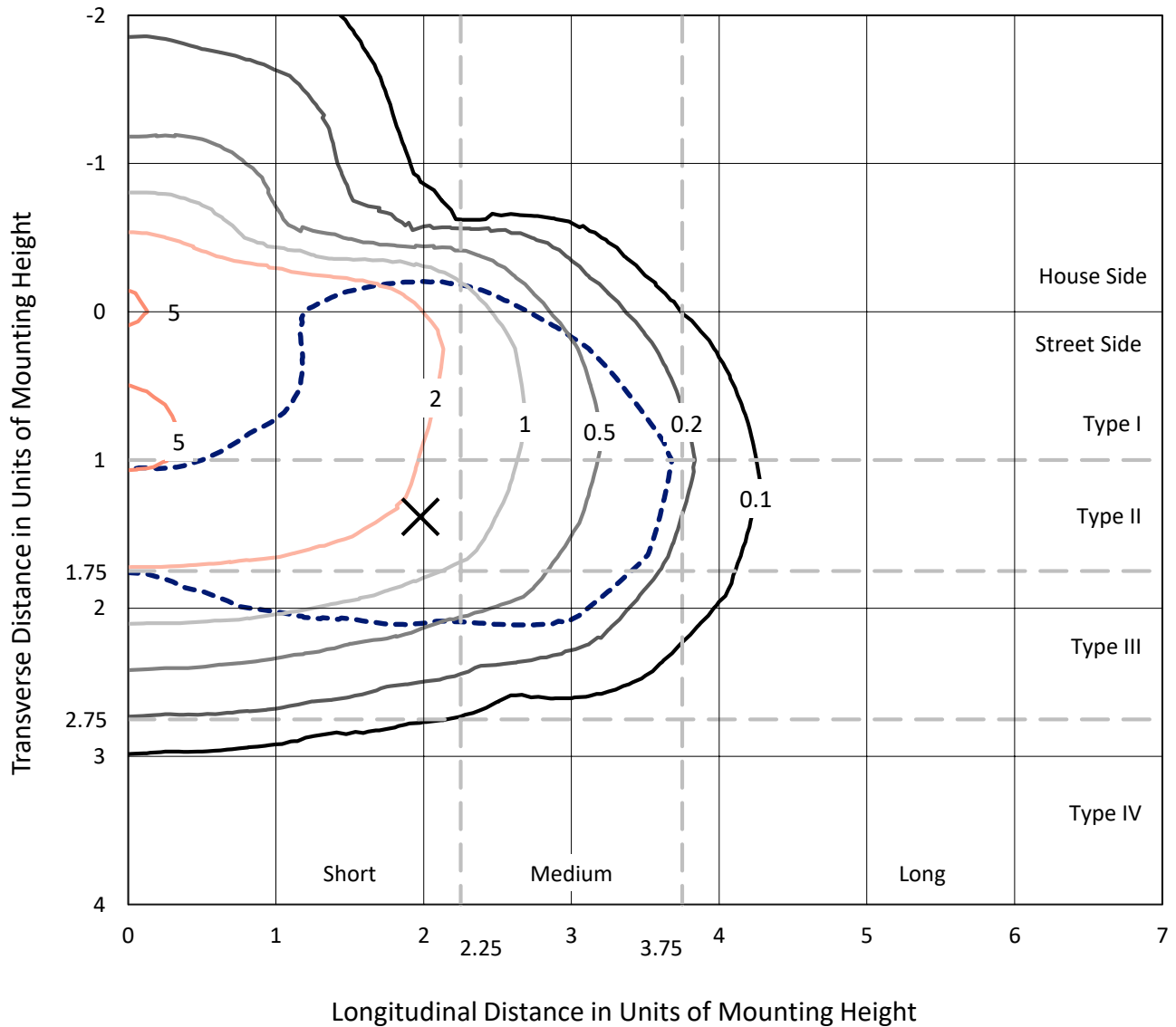


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Iso-Footcandle Lines of Horizontal Illumination

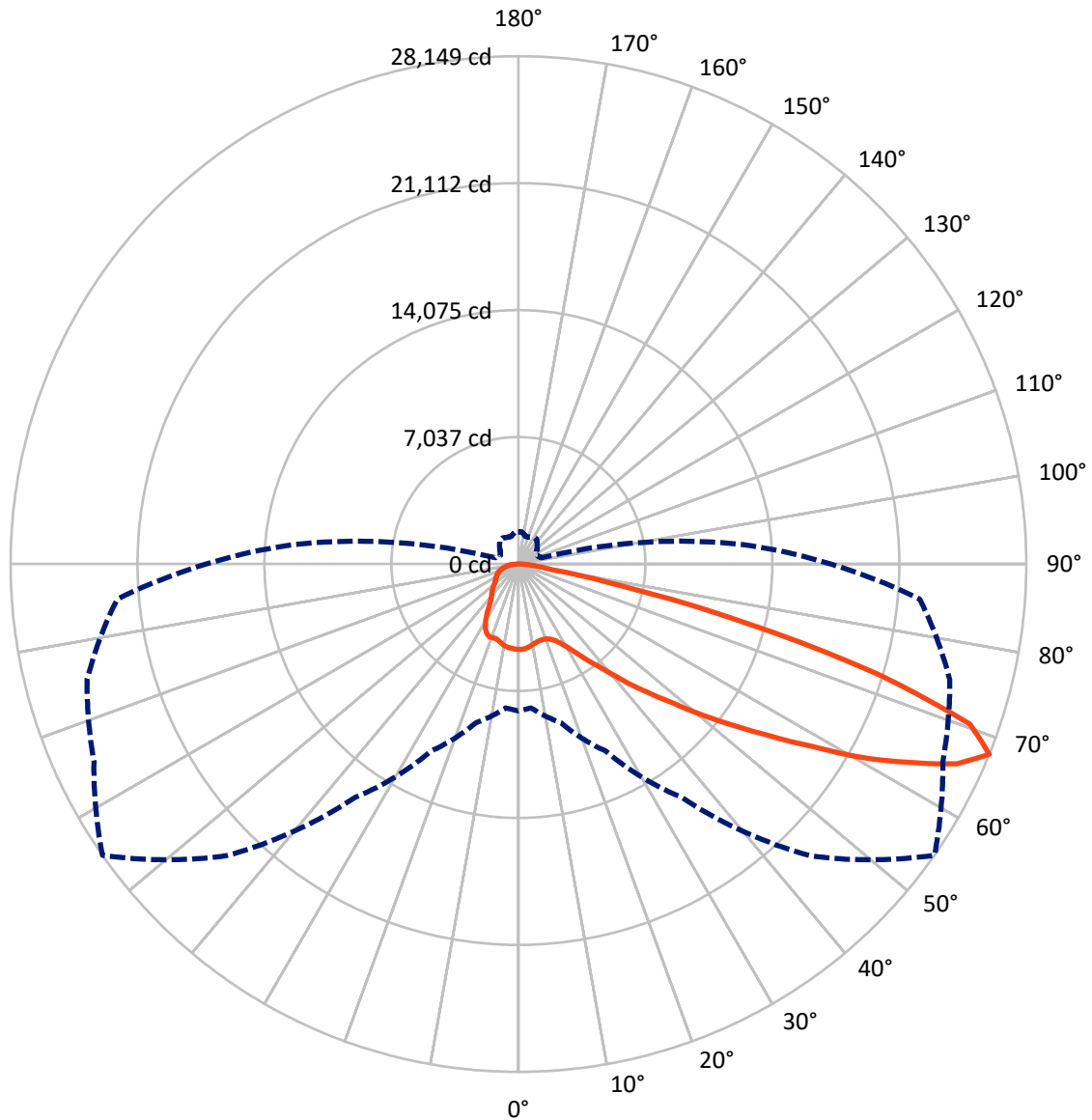
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.4 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8298.5	0.0	8298.5
	% Fixture	21.6	0.0	21.6
Street Side	Lumens	30116.6	0.0	30116.6
	% Fixture	78.4	0.0	78.4
Total	Lumens	38415.0	0.0	38415.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	442.1	1.2
10°-20°	1252.2	3.3
20°-30°	2097.6	5.5
30°-40°	3449.4	9.0
40°-50°	5806.4	15.1
50°-60°	9138.9	23.8
60°-70°	10906.3	28.4
70°-80°	4683.4	12.2
80°-90°	638.5	1.7
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°	38415.0	100.0
0°-180°	38415.0	100.0



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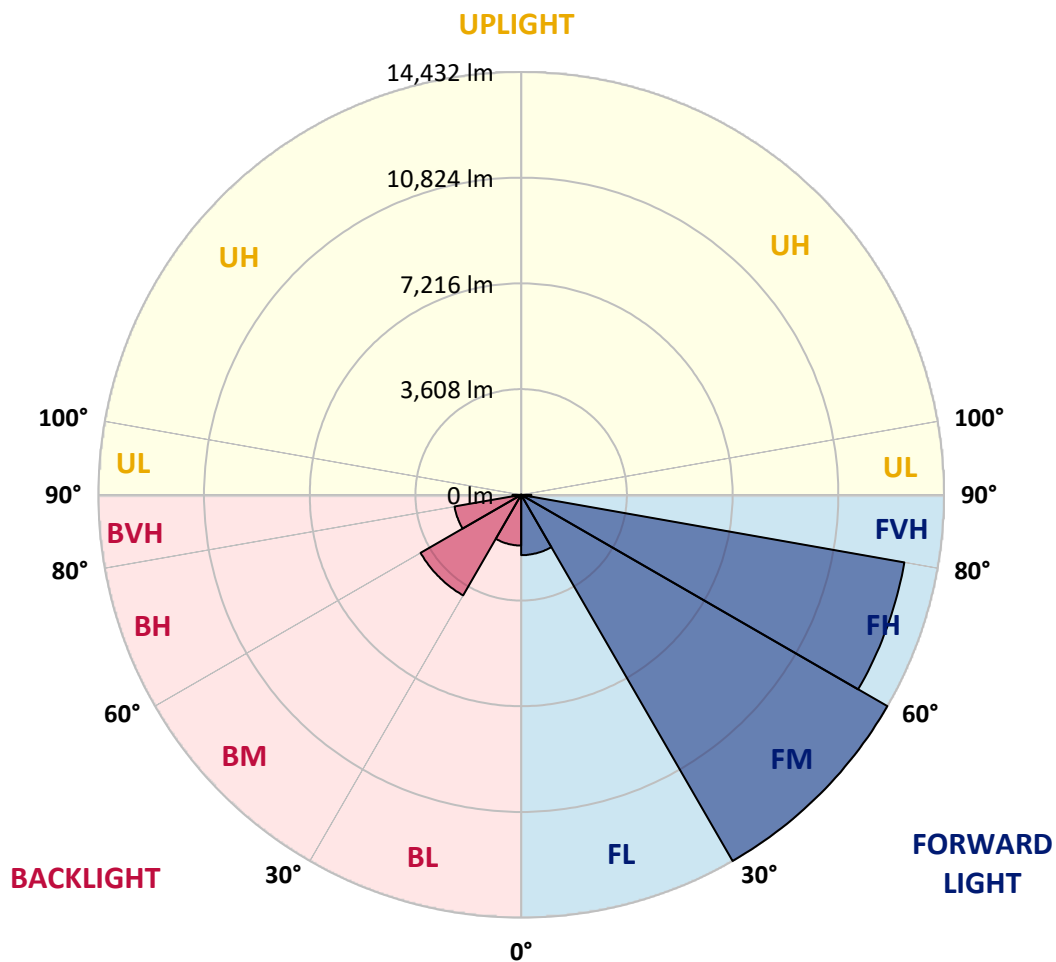
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2059.1	5.4			
FM	(30°-60°)	14431.5	37.6			
FH	(60°-80°)	13280.3	34.6			G5
FVH	(80°-90°)	345.7	0.9			G3/500
BL	(0°-30°)	1732.9	4.5	B3/2500		
BM	(30°-60°)	3963.3	10.3	B3/5000		
BH	(60°-80°)	2309.4	6.0	B3/2500		G3/2500
BVH	(80°-90°)	292.9	0.8			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4737.0	4737.0	4737.0	4737.0	4737.0	4737.0	4737.0	4737.0	4737.0	4737.0	4737.0
2.5°	4696.2	4698.0	4701.7	4716.6	4729.6	4725.9	4727.7	4720.3	4718.4	4707.3	4718.4
5°	4636.8	4642.4	4644.2	4668.3	4683.2	4686.9	4681.3	4672.1	4660.9	4649.8	4655.4
7.5°	4501.3	4516.2	4518.0	4551.4	4575.6	4607.1	4609.0	4610.8	4605.3	4597.8	4609.0
10°	4416.0	4419.7	4417.9	4442.0	4460.5	4495.8	4516.2	4551.4	4566.3	4570.0	4577.4
12.5°	4410.4	4406.7	4401.2	4401.2	4395.6	4410.4	4447.5	4497.6	4532.9	4544.0	4553.3
15°	4469.8	4468.0	4449.4	4421.6	4386.3	4375.2	4406.7	4462.4	4508.8	4532.9	4542.2
17.5°	4603.4	4592.3	4562.6	4499.5	4423.4	4393.7	4397.4	4443.8	4497.6	4529.2	4538.5
20°	4848.3	4848.3	4785.2	4666.5	4531.0	4460.5	4427.1	4455.0	4506.9	4549.6	4562.6
22.5°	5271.4	5275.1	5169.3	4974.5	4746.3	4596.0	4512.5	4506.9	4568.1	4616.4	4631.2
25°	5870.7	5855.8	5707.4	5429.1	5082.1	4833.5	4688.8	4655.4	4707.3	4761.1	4779.7
27.5°	6568.3	6514.5	6338.3	6002.4	5553.4	5189.7	4967.1	4913.3	4963.4	5024.6	5043.1
30°	7258.6	7202.9	6993.2	6625.9	6126.7	5666.6	5347.4	5260.2	5330.7	5417.9	5429.1
32.5°	7948.8	7948.8	7715.0	7286.4	6742.7	6236.2	5854.0	5750.1	5867.0	5972.7	5996.9
35°	8774.5	8778.2	8551.8	8036.0	7451.5	6915.3	6494.1	6418.0	6594.3	6668.5	6726.0
37.5°	9789.4	9809.8	9518.5	8895.1	8254.9	7690.9	7189.9	7086.0	7262.3	7464.5	7650.1
40°	10886.0	10912.0	10591.0	9822.8	9182.7	8592.6	8050.8	7863.4	8156.6	8542.5	8781.9
42.5°	11932.5	12066.1	11756.2	10965.8	10277.4	9667.0	9117.7	8845.0	9212.4	9795.0	10002.8
45°	13444.7	13541.2	13001.2	12285.0	11637.5	10954.6	10227.3	9939.7	10453.7	11188.4	11231.1
47.5°	14452.2	14379.8	14105.2	13659.9	13249.8	12611.6	11516.8	11201.4	11884.2	12748.9	12509.5
50°	14988.4	15010.7	14973.6	14999.5	15014.4	14613.6	13097.7	12665.4	13479.9	14524.6	13973.5
52.5°	15489.4	15341.0	15463.4	16072.0	16806.8	16658.3	14817.7	14366.8	15190.7	16495.1	15520.9
55°	15478.3	15251.9	15650.8	16725.1	18319.0	18489.7	16749.2	16229.7	16999.7	18608.4	17161.2
57.5°	14930.9	14942.0	15556.2	16962.6	19372.9	20211.5	18990.6	18211.4	18918.3	20749.6	18658.5
60°	14177.6	14279.6	15164.7	16923.7	20217.1	21623.5	21740.4	20347.0	20797.9	22696.0	19898.0
62.5°	12962.3	13069.9	14290.8	16519.2	20089.1	22983.6	24226.8	22770.2	22762.8	23876.1	20261.6
65°	11045.6	11014.0	12296.1	15007.0	19014.8	23989.3	26696.4	24865.0	24243.5	23894.6	19530.6
67.5°	8145.5	8004.5	9104.7	11429.6	15804.8	22863.0	28149.2	25956.0	24748.1	22323.1	17296.6
70°	4226.7	4085.7	4976.3	6674.1	10394.3	17844.0	26540.5	25392.0	23633.0	18712.3	13550.4
72.5°	1807.2	1783.1	2144.9	2927.9	5028.3	10292.2	20810.9	21977.9	20278.3	13941.9	9316.3
75°	1215.3	1207.9	1343.4	1595.7	2261.8	4176.6	13023.5	15600.7	14836.3	8644.6	5239.8
77.5°	953.7	944.4	1024.2	1146.7	1465.8	1647.6	5779.8	8375.6	7752.1	3762.9	2293.4
80°	745.9	738.5	788.6	855.4	1053.9	1039.1	1901.8	3332.4	2579.1	1441.7	1115.1
82.5°	588.2	588.2	629.0	630.9	747.8	708.8	992.7	1467.7	1287.7	840.5	682.8
85°	538.1	538.1	580.8	471.3	488.0	447.2	616.0	870.2	816.4	345.1	296.9
87.5°	270.9	263.5	488.0	417.5	265.3	237.5	300.6	421.2	452.7	191.1	148.4
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4737.0	4737.0	4737.0	4737.0	4737.0	4737.0	4737.0	4737.0	4737.0	4737.0
2.5°	4714.7	4712.9	4716.6	4718.4	4733.3	4753.7	4763.0	4776.0	4783.4	4779.7
5°	4659.1	4662.8	4677.6	4688.8	4714.7	4748.1	4766.7	4781.5	4794.5	4788.9
7.5°	4612.7	4622.0	4644.2	4653.5	4668.3	4677.6	4675.8	4681.3	4692.5	4679.5
10°	4586.7	4597.8	4614.5	4601.5	4566.3	4516.2	4469.8	4445.7	4453.1	4443.8
12.5°	4560.7	4575.6	4562.6	4501.3	4403.0	4338.1	4302.8	4306.5	4323.2	4326.9
15°	4545.9	4551.4	4495.8	4380.7	4280.5	4271.3	4289.8	4286.1	4288.0	4288.0
17.5°	4545.9	4531.0	4427.1	4312.1	4269.4	4252.7	4195.2	4122.8	4091.3	4080.2
20°	4570.0	4531.0	4404.9	4328.8	4236.0	4093.1	3941.0	3807.4	3748.0	3731.3
22.5°	4642.4	4575.6	4468.0	4336.2	4072.7	3833.4	3592.2	3432.6	3325.0	3306.4
25°	4788.9	4714.7	4592.3	4237.9	3813.0	3471.6	3197.0	3018.8	2911.2	2896.4
27.5°	5045.0	4996.8	4659.1	4020.8	3467.9	3102.3	2848.1	2710.8	2631.0	2625.5
30°	5430.9	5406.8	4625.7	3699.8	3043.0	2744.2	2621.8	2542.0	2482.6	2480.8
32.5°	6046.9	5852.1	4516.2	3308.3	2655.2	2490.0	2439.9	2391.7	2345.3	2345.3
35°	6839.2	6212.1	4308.4	2889.0	2419.5	2349.0	2285.9	2209.9	2148.6	2144.9
37.5°	7770.7	6434.7	3935.4	2551.3	2308.2	2254.4	2161.6	2048.4	1940.8	1922.3
40°	8711.4	6501.5	3410.3	2343.4	2237.7	2159.8	2046.6	1913.0	1809.1	1803.5
42.5°	9574.2	6373.5	2853.7	2200.6	2167.2	2063.3	1944.5	1825.8	1744.1	1742.3
45°	10297.8	6041.4	2386.1	2065.1	2093.0	1976.1	1870.3	1773.8	1710.7	1697.7
47.5°	10978.8	5572.0	2057.7	1922.3	2018.7	1927.8	1838.8	1747.8	1686.6	1677.3
50°	11769.2	5065.4	1827.6	1783.1	1953.8	1911.1	1864.7	1770.1	1668.1	1656.9
52.5°	12726.6	4627.5	1647.6	1660.6	1903.7	1933.4	1931.5	1833.2	1655.1	1640.2
55°	13795.4	4141.4	1512.2	1560.4	1883.3	1974.2	1948.2	1892.6	1666.2	1643.9
57.5°	14847.4	3573.6	1417.6	1484.4	1853.6	1970.5	1868.4	1788.7	1692.2	1660.6
60°	15636.0	2811.0	1345.2	1417.6	1788.7	1909.3	1781.2	1675.5	1686.6	1662.5
62.5°	15687.9	2172.7	1258.0	1360.1	1690.3	1848.0	1723.7	1625.4	1710.7	1688.5
65°	14765.8	1642.1	1174.5	1291.4	1584.6	1809.1	1668.1	1597.6	1760.8	1736.7
67.5°	12431.6	1321.1	1104.0	1220.9	1478.8	1727.4	1618.0	1571.6	1805.4	1762.7
70°	8974.9	1126.3	1035.3	1135.5	1384.2	1634.7	1573.4	1525.2	1684.8	1618.0
72.5°	5525.6	976.0	957.4	1022.4	1311.8	1538.2	1506.6	1438.0	1517.8	1464.0
75°	2759.1	846.1	870.2	911.0	1209.8	1428.7	1395.3	1326.7	1337.8	1326.7
77.5°	1321.1	723.6	768.2	799.7	1078.0	1304.4	1269.1	1198.6	1185.6	1187.5
80°	836.8	604.9	647.6	669.8	963.0	1159.7	1124.4	1053.9	1202.3	1115.1
82.5°	523.2	491.7	502.8	543.7	838.7	1009.4	963.0	899.9	1083.6	857.2
85°	289.5	343.3	358.1	393.4	645.7	844.2	797.8	718.1	643.8	632.7
87.5°	172.6	204.1	209.7	235.6	434.2	610.4	539.9	512.1	424.9	423.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)