

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: P300440

Luminaire Tested: **GLNA-AF-05-LED-E1-AFL-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300440
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-05-LED-E1-AFL-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19382.2 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

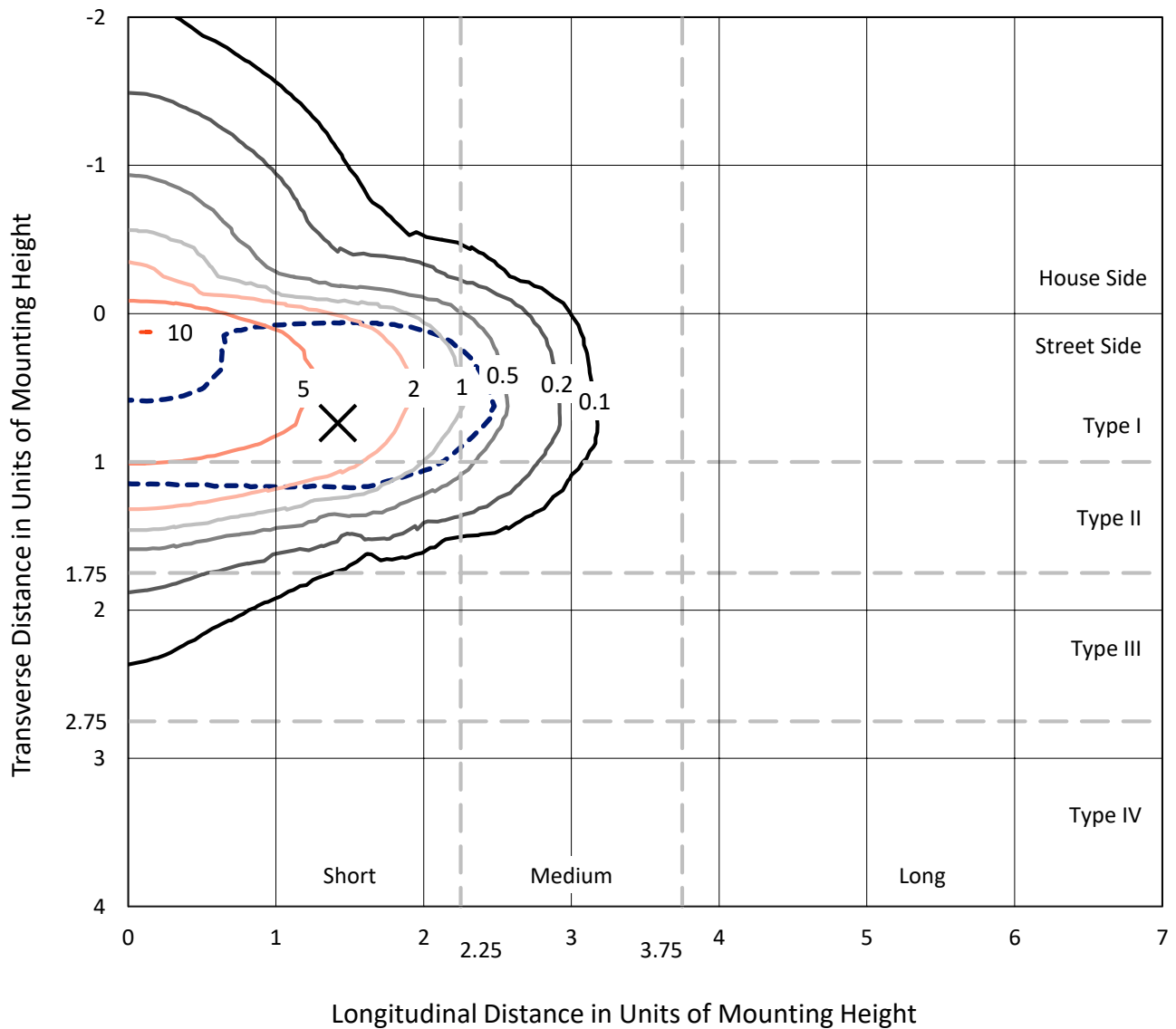
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

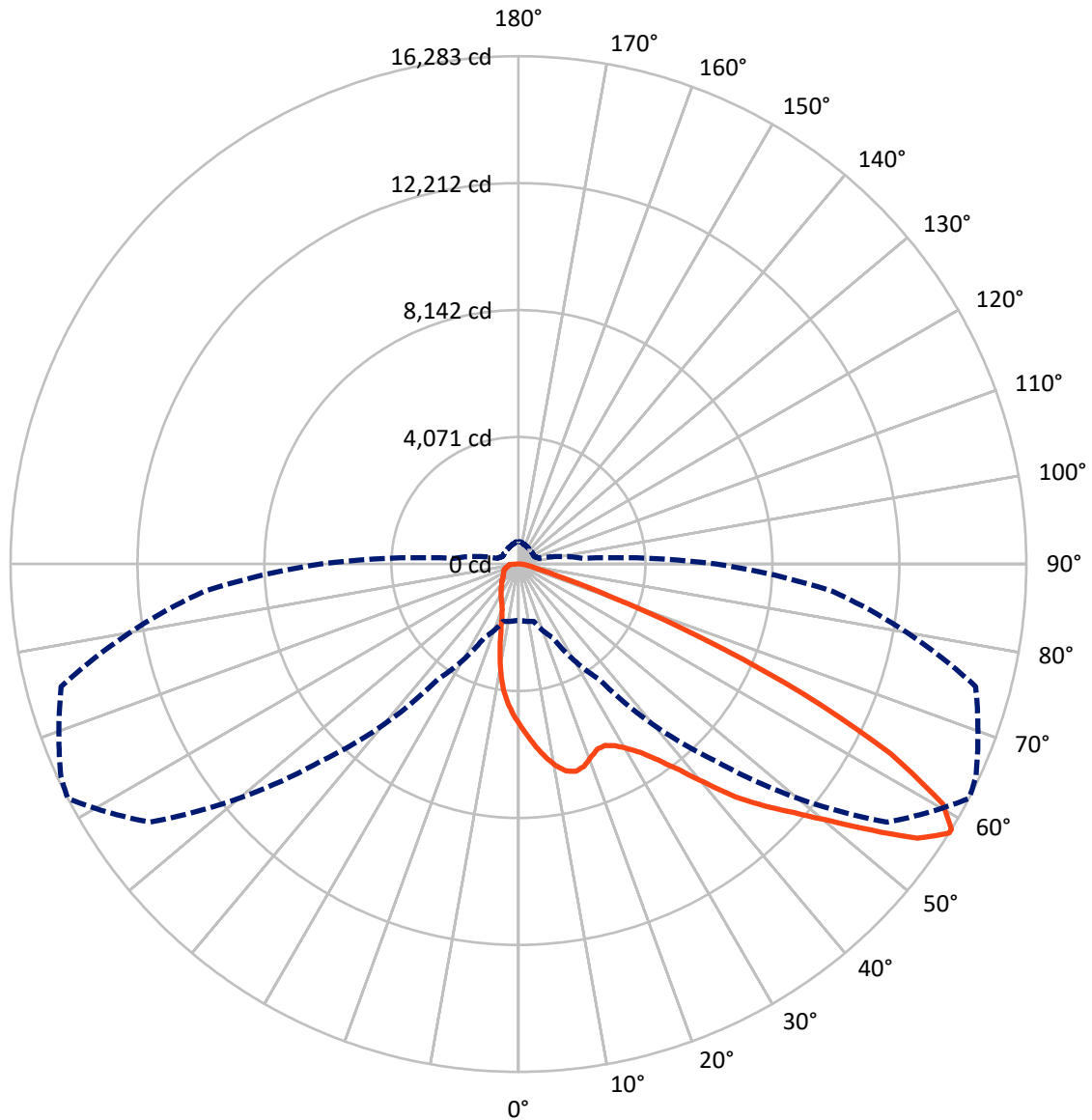
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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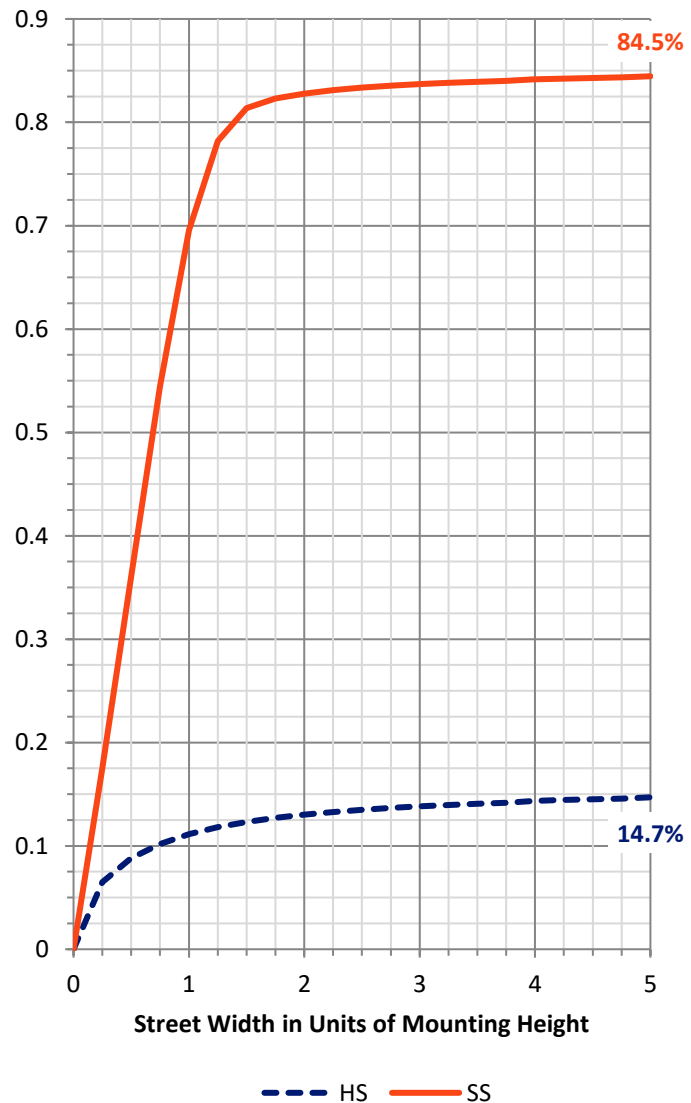
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2955.9	0.0	2955.9
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	16426.3	0.0	16426.3
	% Fixture	84.7	0.0	84.7
Total	Lumens	19382.2	0.0	19382.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	460.5	2.4
10°-20°	1177.0	6.1
20°-30°	1902.7	9.8
30°-40°	3020.4	15.6
40°-50°	4419.5	22.8
50°-60°	4622.5	23.8
60°-70°	2731.0	14.1
70°-80°	769.3	4.0
80°-90°	279.3	1.4
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°	19382.2	100.0
0°-180°	19382.2	100.0



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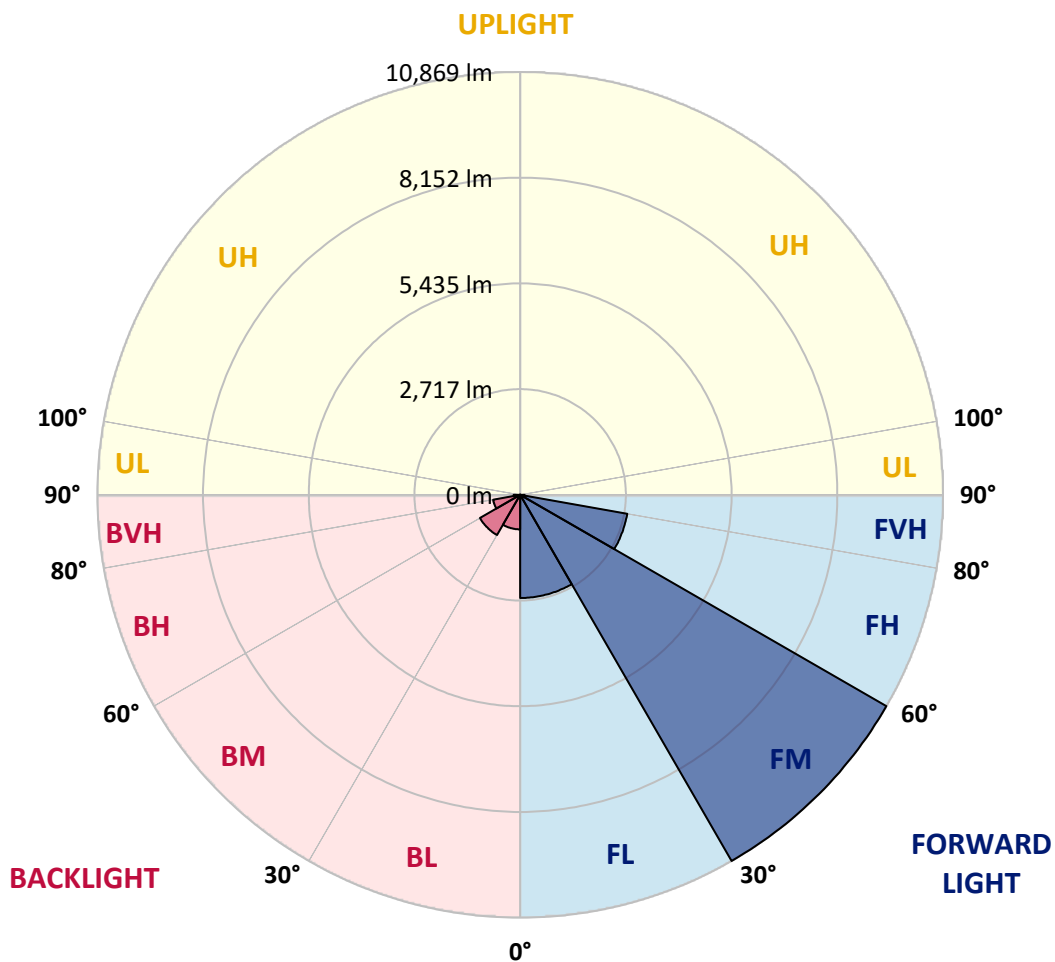
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2651.7	13.7			
FM	(30°-60°)	10869.4	56.1			
FH	(60°-80°)	2795.0	14.4			G2/5000
FVH	(80°-90°)	110.2	0.6			G2/225
BL	(0°-30°)	888.4	4.6	B2/1000		
BM	(30°-60°)	1193.1	6.2	B2/2500		
BH	(60°-80°)	705.3	3.6	B2/1000		G2/1000
BVH	(80°-90°)	169.1	0.9			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	5148.5	5148.5	5148.5	5148.5	5148.5	5148.5	5148.5	5148.5	5148.5	5148.5	5148.5
2.5°	5883.2	5835.7	5805.6	5779.1	5744.5	5670.5	5571.1	5508.1	5476.1	5367.5	5238.8
5°	6460.0	6418.0	6387.0	6351.4	6289.3	6173.4	6012.8	5885.0	5822.0	5604.8	5347.4
7.5°	6324.9	6342.3	6396.1	6490.1	6570.4	6554.9	6411.6	6249.2	6166.1	5864.0	5473.4
10°	5510.8	5540.9	5634.0	5854.0	6209.9	6575.0	6686.4	6574.1	6490.1	6120.5	5603.0
12.5°	5347.4	5346.5	5353.8	5412.2	5624.0	6137.8	6695.5	6808.7	6758.5	6365.1	5735.3
15°	5414.1	5415.9	5410.4	5435.1	5500.8	5704.3	6416.2	6899.0	6934.6	6611.5	5872.2
17.5°	5589.3	5584.7	5563.8	5563.8	5587.5	5666.9	6087.6	6815.0	6979.3	6829.7	5992.7
20°	5883.2	5862.2	5806.5	5755.4	5729.9	5772.8	5952.6	6621.6	6901.8	7020.4	6092.2
22.5°	6239.1	6222.7	6132.4	6022.8	5934.3	5933.4	6021.9	6452.7	6767.6	7200.2	6176.2
25°	6699.1	6672.7	6538.5	6363.3	6208.1	6148.8	6173.4	6444.5	6694.6	7395.5	6251.0
27.5°	7239.4	7191.1	7032.3	6779.5	6551.3	6431.7	6396.1	6593.3	6761.2	7637.4	6355.1
30°	7894.8	7839.1	7635.6	7306.1	6983.9	6787.7	6711.9	6857.0	6982.1	7932.2	6522.1
32.5°	8640.4	8560.1	8324.6	7961.4	7537.9	7238.5	7115.3	7205.7	7305.2	8287.2	6731.1
35°	9670.9	9575.0	9234.6	8733.5	8255.3	7843.6	7646.5	7712.2	7809.0	8816.6	7033.2
37.5°	10373.6	10330.7	10104.4	9633.4	9113.2	8639.5	8334.7	8373.0	8427.8	9478.3	7420.2
40°	10367.2	10384.6	10389.1	10393.7	10039.6	9586.0	9258.3	9218.2	9207.2	10204.8	7860.1
42.5°	9847.9	9919.1	10149.1	10615.5	10830.9	10622.8	10322.5	10206.6	10149.1	11060.9	8326.5
45°	9053.0	9091.3	9522.1	10432.9	11236.1	11649.6	11422.3	11057.2	10953.2	11847.6	8713.4
47.5°	8643.2	8685.1	8956.2	9949.2	11231.6	12479.2	12610.6	11915.2	11729.0	12532.1	9047.5
50°	7667.5	7755.1	8096.5	9107.7	10821.8	12860.7	13852.8	12937.4	12552.2	13198.4	9382.4
52.5°	5875.9	6011.0	6393.4	7724.1	9782.2	12671.8	14846.7	14176.8	13632.8	13888.4	9669.9
55°	3706.4	3806.8	4128.1	5455.1	7825.4	11688.8	15223.7	15517.5	15033.8	14541.9	9919.1
57.5°	2015.2	2059.9	2180.4	3011.9	5090.1	9515.7	14674.2	16280.5	16079.8	15096.8	10107.1
58°	1803.5	1833.6	1908.4	2610.3	4514.2	8921.5	14430.5	16283.3	16182.9	15178.0	10121.7
60°	1338.0	1322.5	1255.9	1489.5	2512.6	6163.4	12957.4	15631.6	15926.4	15277.5	10050.5
62.5°	1175.5	1138.1	1002.1	986.6	1222.1	2839.4	9914.5	13390.1	14086.4	14709.8	9617.9
65°	1104.4	1064.2	889.0	832.4	881.7	1201.1	5840.3	10042.3	10915.8	12988.5	8511.7
67.5°	1051.4	999.4	816.9	739.3	742.9	794.0	2341.0	6324.9	7307.9	9861.6	6620.6
70°	1000.3	943.7	755.7	666.3	645.3	627.9	930.9	3166.1	4057.8	6229.1	4221.2
72.5°	945.5	889.9	701.9	608.8	567.7	510.2	607.9	1295.1	1808.9	2947.1	1914.8
75°	866.1	815.9	648.0	557.7	499.2	422.6	459.1	676.3	811.4	1173.7	922.7
77.5°	768.5	727.4	587.8	515.7	442.7	343.2	353.2	469.1	520.2	671.7	548.5
80°	552.2	566.8	523.0	463.6	394.3	278.4	271.1	342.3	369.6	431.7	356.9
82.5°	387.9	396.1	432.6	378.8	325.8	219.0	199.9	240.9	257.4	283.8	192.6
85°	267.4	258.3	296.6	263.8	235.5	146.0	136.9	163.4	173.4	176.1	99.5
87.5°	160.6	160.6	171.6	141.5	126.9	75.8	73.9	93.1	99.5	94.9	54.8
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5148.5	5148.5	5148.5	5148.5	5148.5	5148.5	5148.5	5148.5	5148.5	5148.5	5148.5
2.5°	5162.2	5097.4	4959.6	4849.1	4709.5	4564.4	4483.1	4396.4	4337.1	4294.2	4362.7
5°	5201.4	5069.1	4784.3	4514.2	4215.7	3905.4	3669.9	3450.9	3298.5	3203.5	3293.0
7.5°	5263.5	5059.9	4606.3	4144.5	3608.8	3092.2	2630.4	2341.0	2172.2	2089.1	2141.2
10°	5334.7	5045.3	4397.3	3643.5	2876.8	2226.0	1881.1	1764.2	1725.9	1710.4	1717.7
12.5°	5394.0	5014.3	4140.9	3037.4	2160.3	1757.8	1658.4	1655.6	1663.8	1665.7	1668.4
15°	5436.0	4968.7	3760.3	2405.8	1727.7	1601.8	1596.3	1612.7	1628.2	1634.6	1638.3
17.5°	5464.3	4874.7	3330.4	1902.0	1547.9	1526.0	1538.8	1559.8	1576.2	1580.8	1584.4
20°	5461.5	4736.9	2818.4	1586.3	1450.3	1450.3	1472.2	1488.6	1489.5	1484.0	1486.8
22.5°	5433.2	4547.9	2321.9	1418.3	1363.6	1379.1	1401.0	1385.5	1321.6	1279.6	1282.3
25°	5385.8	4322.5	1896.6	1311.5	1283.2	1310.6	1304.2	1187.4	1096.1	1055.1	1055.1
27.5°	5343.8	4056.0	1569.8	1218.4	1202.9	1236.7	1123.5	1017.6	979.3	960.1	953.8
30°	5313.7	3768.5	1351.7	1129.0	1127.2	1102.5	974.8	945.5	939.2	923.6	918.2
32.5°	5321.0	3477.3	1212.1	1050.5	1056.9	943.7	903.6	910.0	904.5	888.0	880.7
35°	5381.2	3200.8	1120.8	979.3	960.1	852.5	861.6	873.4	871.6	848.8	841.5
37.5°	5488.9	2938.9	1060.5	920.0	837.8	806.8	821.4	839.7	835.1	819.6	814.1
40°	5602.1	2692.4	1011.3	873.4	765.7	775.8	788.6	798.6	803.2	807.7	804.1
42.5°	5712.5	2435.1	951.0	826.0	735.6	746.6	752.1	762.1	786.7	804.1	803.2
45°	5778.2	2193.2	889.0	758.4	711.9	718.3	714.6	734.7	764.8	793.1	794.0
47.5°	5851.2	2005.2	839.7	696.4	689.1	693.6	682.7	702.8	730.2	764.8	768.5
50°	5939.8	1892.9	800.4	647.1	658.0	658.0	655.3	673.6	711.9	752.1	759.4
52.5°	6040.2	1871.0	767.6	611.5	627.0	626.1	628.8	656.2	698.2	737.5	743.8
55°	6162.5	1930.3	732.0	585.0	596.9	600.5	609.7	640.7	676.3	721.0	723.8
57.5°	6304.9	2050.8	703.7	564.0	569.5	581.4	596.0	624.3	662.6	711.9	714.6
58°	6328.6	2076.4	699.1	562.2	564.0	577.7	594.2	621.5	659.9	713.7	716.5
60°	6329.5	2161.2	689.1	554.0	543.0	565.9	584.1	611.5	655.3	720.1	726.5
62.5°	6105.0	2160.3	681.8	542.1	521.1	549.4	570.4	602.4	650.7	735.6	748.4
65°	5375.7	1963.2	647.1	523.9	503.8	534.8	558.6	596.0	663.5	803.2	811.4
67.5°	4204.8	1609.1	582.3	498.3	481.0	520.2	551.3	595.1	677.2	818.7	824.2
70°	2780.1	1203.8	511.1	469.1	457.3	502.9	554.9	626.1	661.7	785.8	771.2
72.5°	1443.0	845.2	453.6	432.6	429.9	487.4	607.9	622.5	646.2	739.3	721.0
75°	757.5	586.9	403.4	392.5	397.0	483.7	717.4	606.0	626.1	707.3	742.0
77.5°	463.6	473.7	360.5	355.9	365.1	472.8	716.5	585.0	596.9	650.7	689.1
80°	310.3	384.2	327.7	328.6	335.0	432.6	643.4	552.2	561.3	615.2	654.4
82.5°	196.2	227.3	297.5	313.1	304.8	356.9	546.7	502.9	515.7	703.7	743.8
85°	99.5	142.4	258.3	301.2	274.7	250.1	443.6	440.8	447.2	507.5	530.3
87.5°	45.6	78.5	201.7	262.9	207.2	156.1	322.2	326.7	352.3	360.5	360.5
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)