

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: P301178

Luminaire Tested: **GLNA-AF-07-LED-E1-T3R-8030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301178
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194839)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-07-LED-E1-T3R-8030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28281.3 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 295
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

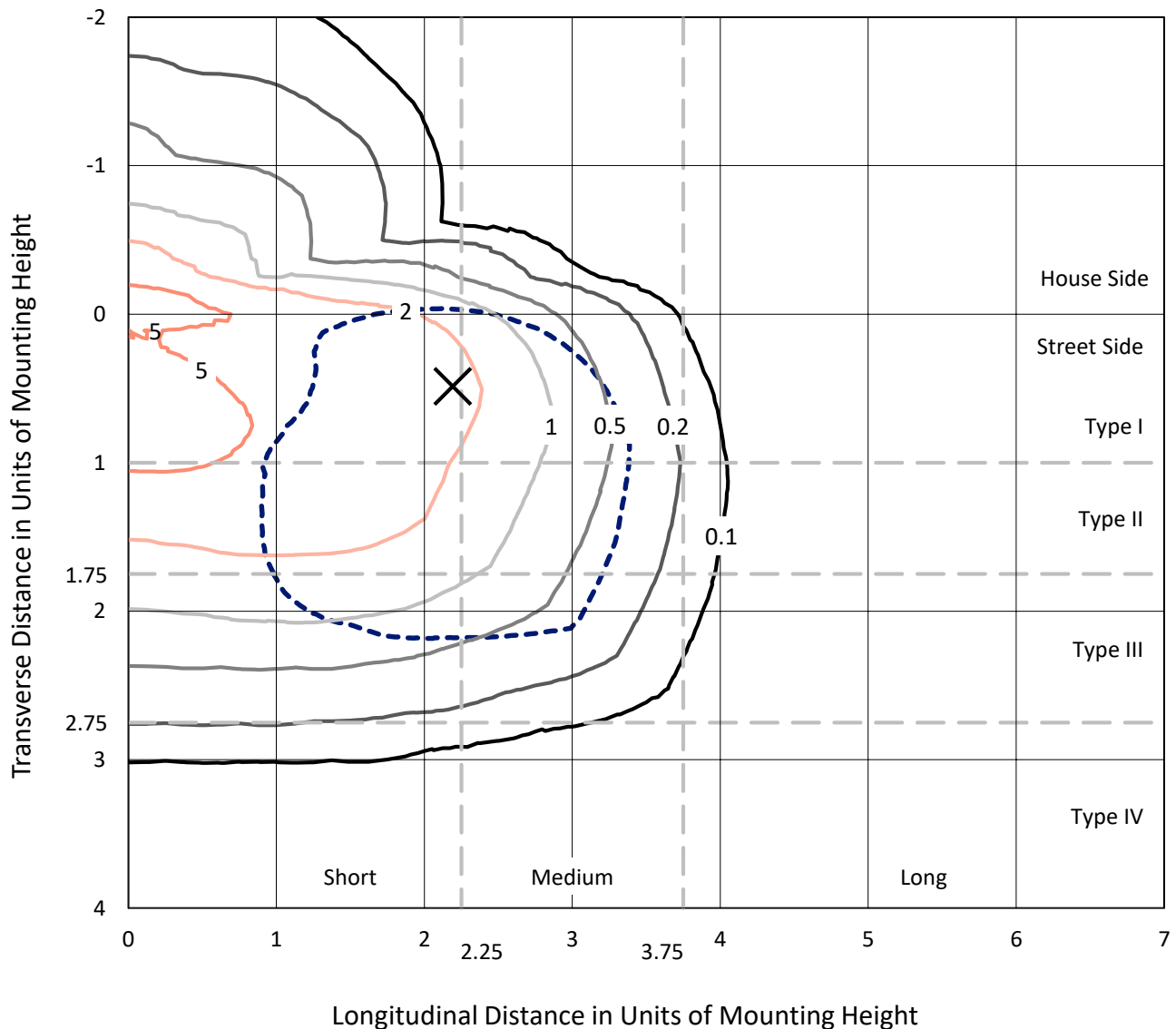


REPORT NUMBER: P301178

CATALOG NUMBER: GLNA-AF-07-LED-E1-T3R-8030-800

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

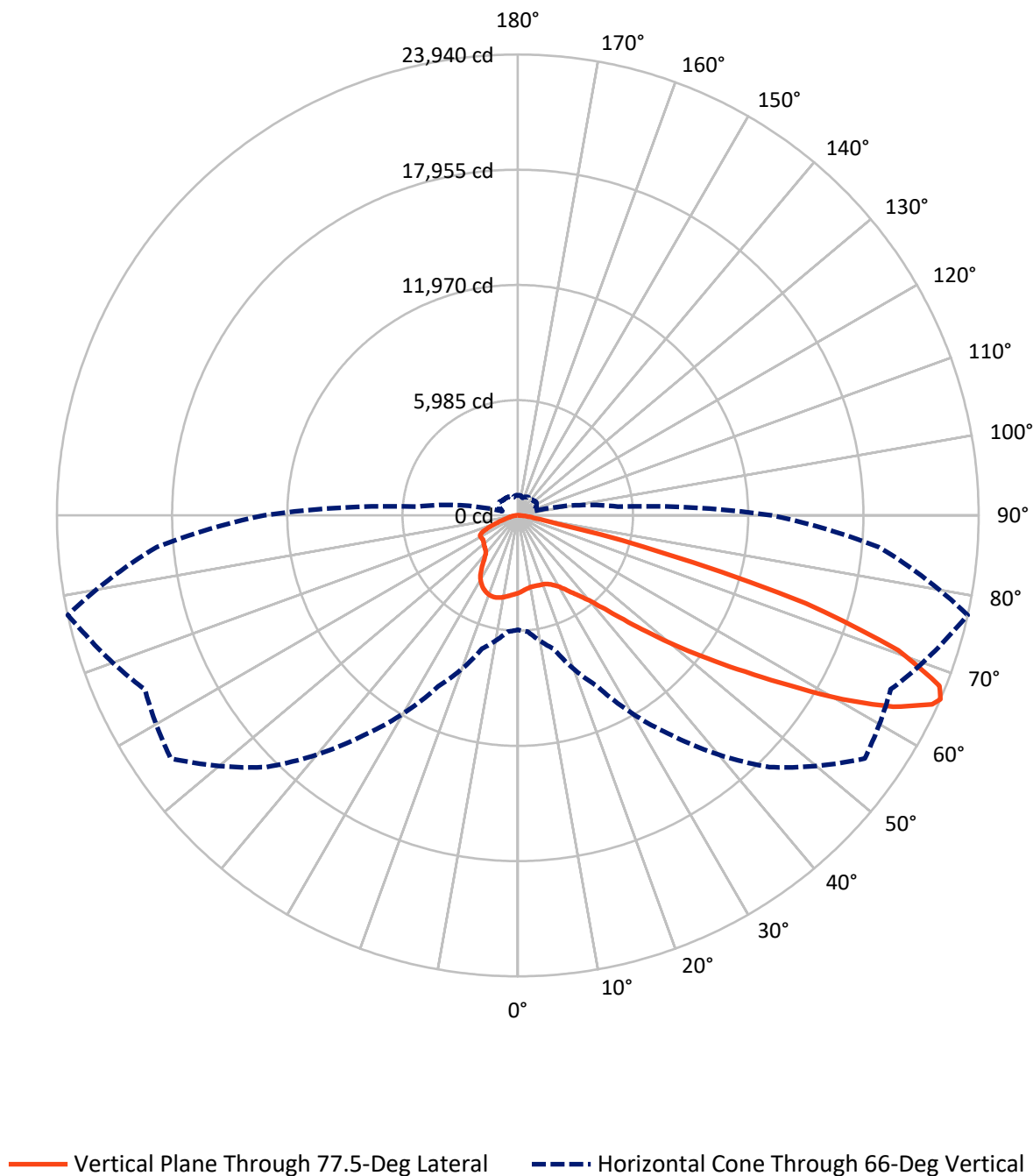


Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
 Type III - Short - Full Cutoff

REPORT NUMBER: P301178

CATALOG NUMBER: GLNA-AF-07-LED-E1-T3R-8030-800

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4831.7	0.0	4831.7
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	23449.6	0.0	23449.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	28281.3	0.0	28281.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	360.1	1.3
10°-20°	1015.8	3.6
20°-30°	1733.6	6.1
30°-40°	2775.2	9.8
40°-50°	4287.5	15.2
50°-60°	6081.1	21.5
60°-70°	8134.9	28.8
70°-80°	3532.8	12.5
80°-90°	360.2	1.3
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°	28281.3	100.0
0°-180°	28281.3	100.0

Coefficient of Utilization



REPORT NUMBER: P301178

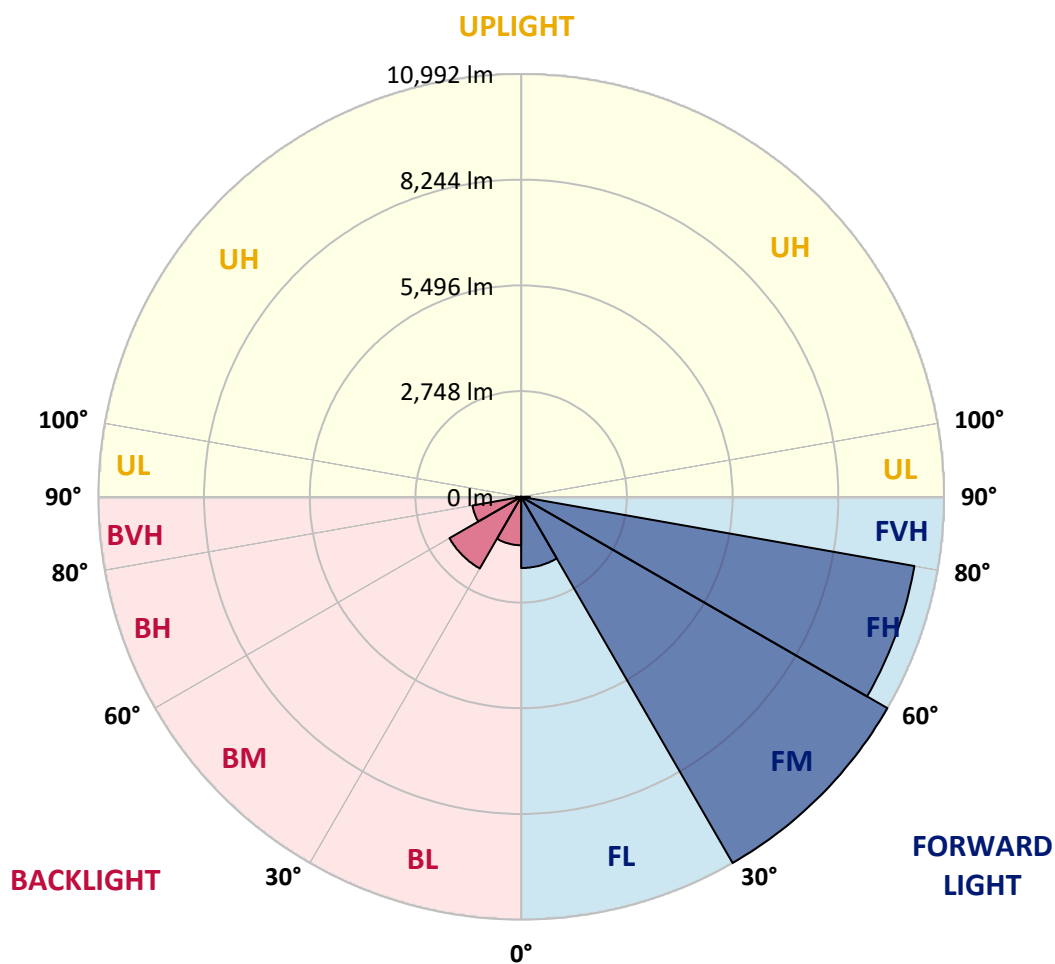
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1851.1	6.5			
FM	(30°-60°)	10991.6	38.9			
FH	(60°-80°)	10380.9	36.7			G4/12000
FVH	(80°-90°)	225.9	0.8			G3/500
BL	(0°-30°)	1258.4	4.4	B3/2500		
BM	(30°-60°)	2152.2	7.6	B2/2500		
BH	(60°-80°)	1286.8	4.5	B3/2500		G3/2500
BVH	(80°-90°)	134.3	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short



REPORT NUMBER: P301178

CATALOG NUMBER: GLNA-AF-07-LED-E1-T3R-8030-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	4030.2	4030.2	4030.2	4030.2	4030.2	4030.2	4030.2	4030.2	4030.2	4030.2	4030.2
2.5°	3565.3	3589.2	3609.4	3628.0	3665.2	3726.7	3797.5	3855.0	3937.9	3954.1	3998.2
5°	3238.0	3238.0	3253.8	3282.1	3332.7	3424.9	3521.2	3649.4	3829.9	3872.4	3990.1
7.5°	3079.0	3080.2	3089.5	3113.4	3157.5	3241.6	3347.2	3498.5	3742.9	3813.7	4014.0
10°	3137.6	3124.3	3104.1	3092.3	3098.8	3148.2	3248.5	3416.8	3689.5	3780.1	4067.8
12.5°	3466.2	3441.1	3371.5	3279.2	3191.0	3155.0	3213.7	3378.0	3666.8	3772.4	4138.6
15°	4003.5	3993.0	3863.1	3672.1	3458.5	3279.2	3239.2	3363.4	3669.3	3781.8	4222.8
17.5°	4677.1	4662.2	4491.4	4213.5	3864.7	3515.9	3328.6	3375.5	3678.6	3797.5	4304.1
20°	5357.2	5311.5	5127.4	4796.1	4348.2	3837.6	3477.1	3406.3	3690.7	3814.9	4389.9
22.5°	5865.0	5827.4	5661.9	5339.8	4824.0	4210.6	3676.2	3459.7	3729.6	3865.9	4495.1
25°	6311.3	6313.7	6149.4	5838.3	5305.1	4606.3	3932.7	3602.5	3828.3	3969.9	4639.5
27.5°	6863.2	6831.2	6677.4	6368.7	5780.9	5005.7	4242.6	3799.1	3975.6	4118.4	4829.2
30°	7523.0	7500.4	7322.8	6972.8	6308.5	5434.5	4596.6	4027.3	4165.3	4313.4	5077.7
32.5°	8299.5	8288.9	8104.4	7654.1	6917.8	5939.9	5012.5	4329.6	4448.5	4602.3	5434.5
35°	9211.0	9212.2	8994.6	8453.2	7584.5	6527.7	5483.9	4718.4	4793.2	4953.5	5859.8
37.5°	9772.2	9840.2	9758.8	9207.0	8339.5	7185.2	6096.0	5234.2	5186.1	5347.9	6315.3
40°	9892.4	9975.3	10233.0	9952.6	9184.3	7909.4	6638.6	5729.9	5670.0	5867.4	6902.0
42.5°	9724.0	9838.9	10384.3	10581.8	10080.9	8802.0	7368.1	6466.2	6390.2	6656.0	7631.5
45°	9623.7	9709.5	10340.2	10909.5	10858.5	9811.0	8297.0	7390.7	7362.8	7711.6	8473.4
47.5°	9450.1	9527.8	10134.3	10985.6	11315.7	10735.5	9412.9	8521.6	8576.2	9033.4	9423.4
50°	9543.6	9575.6	9904.5	10791.8	11448.0	11413.2	10659.5	9830.9	10018.2	10588.7	10499.2
52.5°	9530.2	9613.2	9877.8	10473.8	11465.4	11831.6	11887.4	11291.4	11685.9	12340.6	11692.4
55°	7705.1	7857.2	9563.8	10393.6	11526.5	12241.4	12980.6	12830.9	13565.7	14328.7	13039.3
57.5°	7357.6	7453.9	8399.8	10562.0	11852.6	13024.7	14196.4	14525.4	15754.5	16640.6	14680.3
60°	7289.2	7408.1	8387.7	10767.9	12514.1	14300.8	15999.3	16576.7	18418.0	19388.2	16583.1
62.5°	7076.8	7205.0	8308.8	10740.8	13453.6	16066.1	18307.1	18757.4	20943.5	21887.0	18174.8
65°	6403.5	6523.7	7666.3	10309.5	14087.2	17950.3	21038.1	20756.5	22937.3	23646.6	18968.2
66°	5942.3	6060.0	7159.7	9801.7	13939.9	18484.7	22005.9	21375.2	23383.6	23939.5	18813.3
67.5°	5099.1	5191.4	6176.1	8664.4	13158.2	18634.4	22819.6	21840.1	23430.1	23626.7	17927.6
70°	3221.8	3248.5	4014.0	5981.1	9960.7	16160.8	21580.7	20685.7	21498.2	20966.1	15029.1
72.5°	1397.9	1388.6	1927.1	3042.6	5639.2	10844.0	17457.1	17068.3	16863.9	15650.6	10520.7
75°	777.6	788.6	1001.0	1412.4	2291.6	5326.5	11419.7	10928.1	9226.8	7873.4	4770.6
77.5°	623.9	638.9	829.8	1002.2	1028.9	1857.5	5343.9	4348.2	2617.7	2100.7	1325.5
80°	493.2	519.9	724.2	780.5	693.5	765.5	1726.4	1380.5	1035.8	950.0	687.0
82.5°	390.0	409.0	621.5	590.7	485.1	515.9	827.0	806.0	673.7	613.4	396.9
85°	280.8	315.2	510.6	445.1	318.0	347.5	549.0	526.4	386.0	315.2	175.2
87.5°	114.9	149.7	360.9	295.4	177.6	161.8	273.9	257.7	182.9	133.5	87.0
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: P301178

CATALOG NUMBER: GLNA-AF-07-LED-E1-T3R-8030-800

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4030.2	4030.2	4030.2	4030.2	4030.2	4030.2	4030.2	4030.2	4030.2	4030.2	4030.2
2.5°	4026.1	4058.1	4099.8	4125.3	4138.6	4147.9	4162.5	4161.3	4165.3	4166.5	4171.8
5°	4052.8	4106.2	4166.5	4182.7	4182.7	4167.7	4153.2	4128.9	4119.6	4117.2	4119.6
7.5°	4122.4	4181.1	4233.3	4214.7	4174.6	4115.5	4039.5	3972.7	3936.7	3924.6	3922.1
10°	4210.6	4281.4	4302.9	4232.1	4114.3	3972.7	3821.8	3712.2	3649.4	3632.1	3626.8
12.5°	4317.4	4384.2	4355.1	4205.4	3987.3	3759.1	3550.3	3375.5	3244.4	3203.2	3200.3
15°	4435.2	4487.4	4384.2	4122.4	3797.5	3460.9	3089.5	2787.7	2624.6	2572.4	2568.4
17.5°	4544.8	4571.5	4366.8	3978.0	3518.4	2973.4	2480.2	2247.5	2191.7	2205.0	2207.5
20°	4638.3	4638.3	4308.1	3770.8	3079.0	2330.5	2018.9	2015.3	2055.3	2095.4	2103.5
22.5°	4741.0	4679.5	4205.4	3478.3	2455.9	1906.9	1861.5	1898.8	1944.1	1988.2	1995.1
25°	4868.1	4713.1	4062.1	3034.9	1930.7	1731.7	1749.1	1779.8	1802.5	1830.8	1834.8
27.5°	5009.7	4755.6	3874.0	2423.9	1675.8	1622.4	1635.8	1646.3	1643.5	1654.4	1656.8
30°	5179.2	4805.4	3615.9	1894.7	1570.2	1528.6	1504.7	1495.4	1495.4	1512.8	1519.3
32.5°	5406.6	4878.6	3245.7	1623.6	1519.3	1461.8	1384.5	1349.7	1363.1	1421.7	1435.1
35°	5656.6	4957.5	2744.8	1531.4	1508.7	1431.1	1310.9	1246.6	1248.2	1302.8	1320.2
37.5°	5928.9	5057.8	2195.3	1514.0	1532.6	1432.7	1272.0	1183.8	1147.8	1147.8	1154.7
40°	6277.7	5160.6	1777.4	1526.1	1583.6	1448.5	1252.2	1134.5	1032.9	1035.8	1041.0
42.5°	6732.1	5248.8	1552.8	1551.2	1645.1	1469.9	1250.6	1068.9	980.7	1041.0	1095.6
45°	7237.4	5292.9	1453.7	1574.3	1694.4	1483.2	1229.6	1058.4	987.6	1166.4	1270.8
47.5°	7818.4	5267.4	1399.1	1582.0	1706.6	1483.2	1205.3	1083.9	1034.1	1350.9	1472.7
50°	8456.0	5194.2	1345.7	1566.2	1702.5	1480.4	1227.9	1109.0	1051.5	1382.9	1467.1
52.5°	9205.8	5132.7	1289.4	1531.4	1674.2	1465.8	1254.7	1098.5	996.9	1257.5	1316.1
55°	10060.7	5150.1	1226.7	1482.0	1630.1	1437.9	1245.3	1055.6	939.5	1107.8	1143.8
57.5°	11153.9	5357.2	1151.9	1419.3	1570.2	1391.0	1212.2	1035.8	922.1	1005.0	1026.5
60°	12373.7	5717.7	1058.4	1356.2	1495.4	1316.1	1186.7	1045.1	930.2	996.9	1007.4
62.5°	13269.1	5927.7	978.3	1264.0	1393.8	1233.2	1154.7	1056.8	951.6	1024.8	1022.4
65°	13512.3	5583.0	878.0	1129.2	1256.3	1146.6	1114.3	1070.2	960.9	1047.5	1035.8
66°	13171.6	5211.6	833.9	1066.5	1186.7	1103.7	1094.4	1068.9	956.9	1050.3	1030.1
67.5°	12344.6	4449.7	757.8	974.3	1075.8	1039.8	1062.5	1056.8	945.9	1047.5	1019.6
70°	10067.5	3036.1	648.2	811.2	895.4	915.2	1001.0	1014.3	911.1	1001.0	939.5
72.5°	7034.3	1849.4	573.3	629.6	724.2	780.5	916.8	955.2	864.6	873.9	815.3
75°	3399.4	982.4	519.9	487.9	562.4	652.2	815.3	875.1	791.0	731.1	709.7
77.5°	1059.6	600.0	441.0	392.9	441.0	526.4	681.3	767.1	704.4	612.2	604.1
80°	569.3	441.0	339.5	315.2	348.8	413.1	535.7	640.1	605.3	549.0	490.4
82.5°	375.5	286.0	251.3	244.4	265.8	315.2	398.1	530.4	530.4	470.5	342.3
85°	193.8	175.2	172.4	172.4	185.7	210.0	271.1	409.0	435.7	248.4	205.9
87.5°	96.3	100.3	93.5	97.5	104.4	102.8	129.5	205.9	246.0	150.9	125.4
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)