

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: P299269

Luminaire Tested: **GLNA-AF-10-LED-E1-T3-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299269
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-10-LED-E1-T3-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33612.6 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 323
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

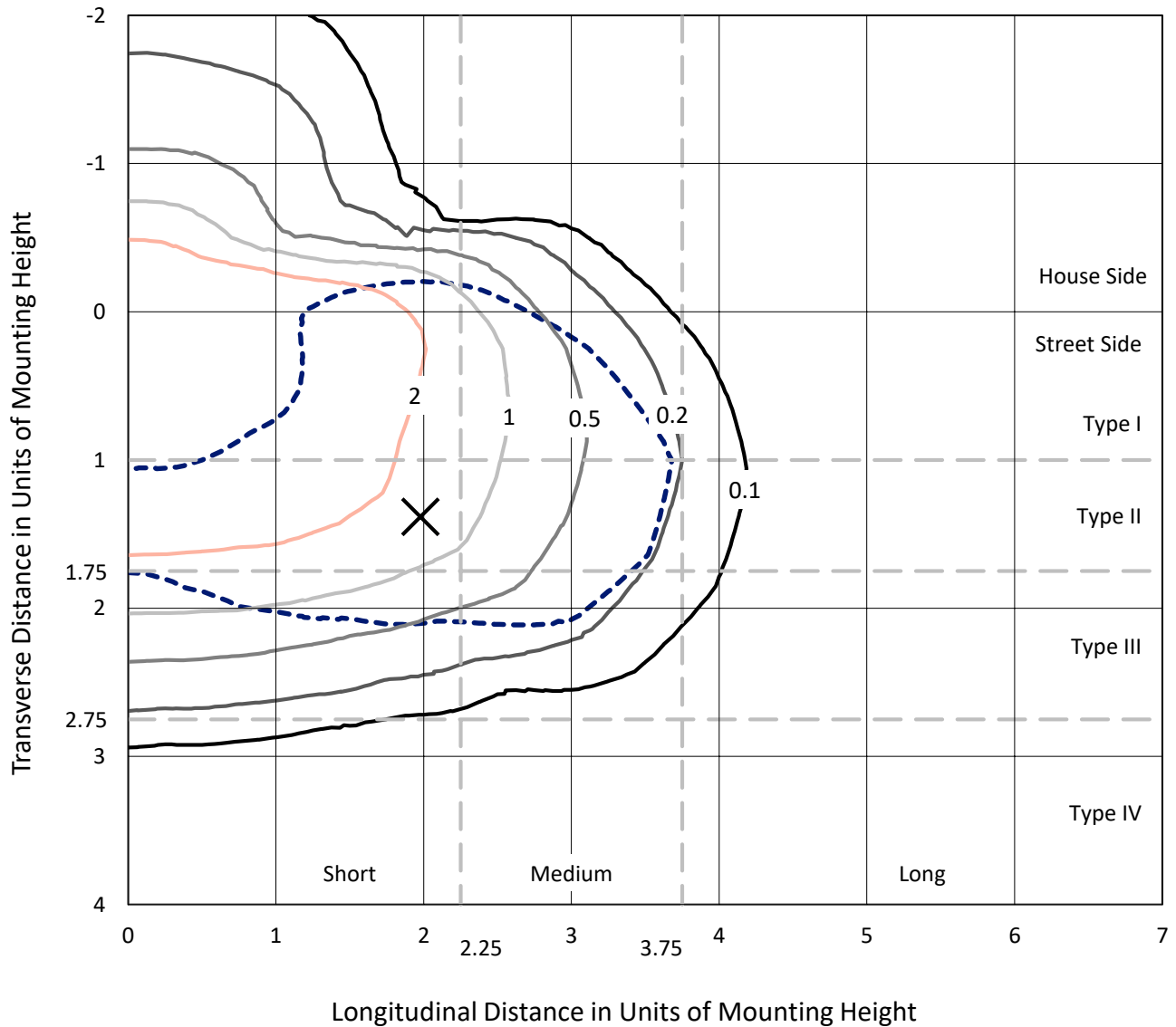


REPORT NUMBER: P299269

CATALOG NUMBER: GLNA-AF-10-LED-E1-T3-7027-600

Iso-Footcandle Lines of Horizontal Illumination

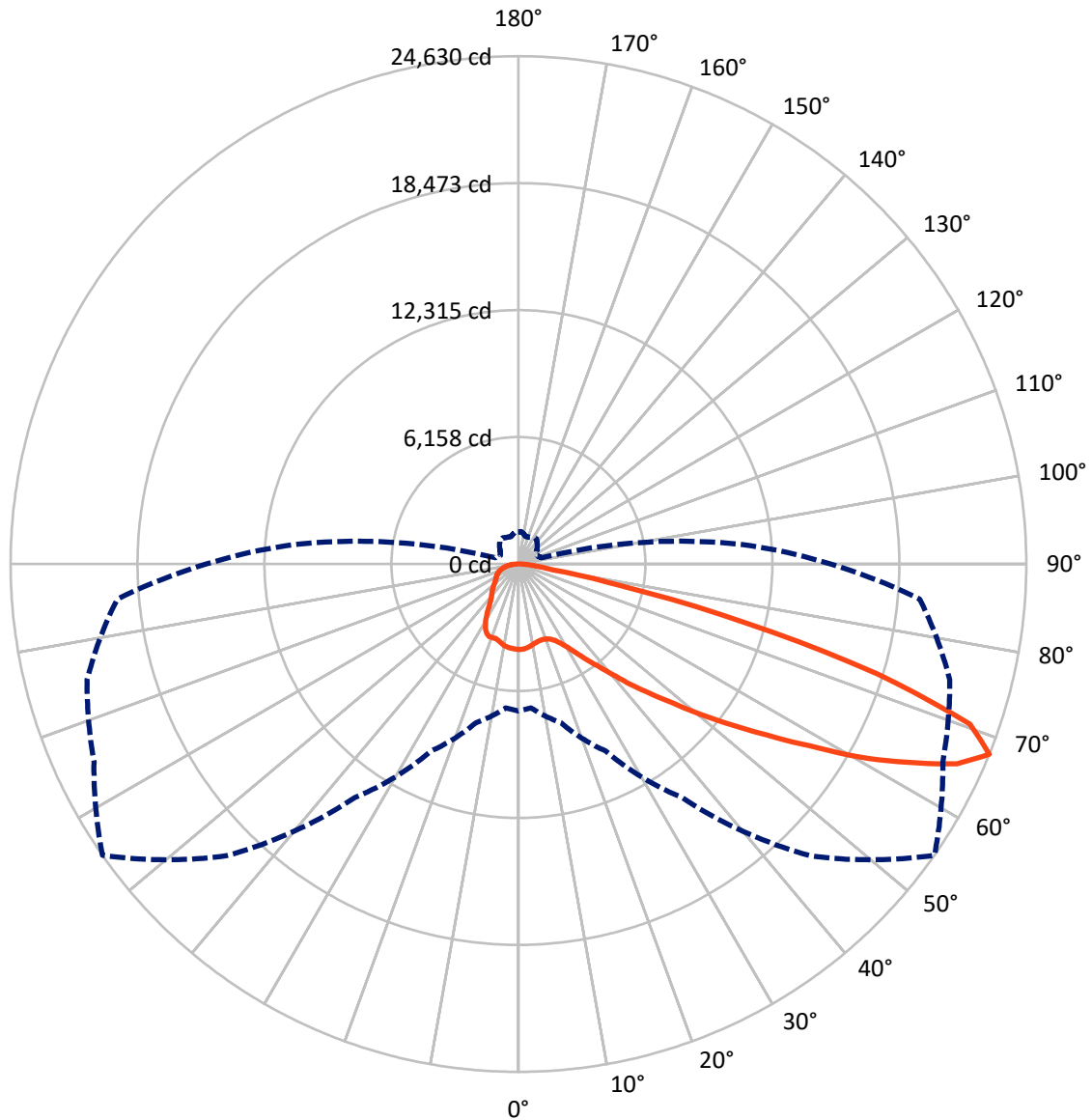
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.7 fc
 Type III - Short - Full Cutoff

REPORT NUMBER: P299269
CATALOG NUMBER: GLNA-AF-10-LED-E1-T3-7027-600

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299269

CATALOG NUMBER: GLNA-AF-10-LED-E1-T3-7027-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7261.0	0.0	7261.0
	% Fixture	21.6	0.0	21.6
Street Side	Lumens	26351.6	0.0	26351.6
	% Fixture	78.4	0.0	78.4
Total	Lumens	33612.6	0.0	33612.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	386.9	1.2
10°-20°	1095.7	3.3
20°-30°	1835.4	5.5
30°-40°	3018.2	9.0
40°-50°	5080.6	15.1
50°-60°	7996.4	23.8
60°-70°	9542.9	28.4
70°-80°	4097.9	12.2
80°-90°	558.7	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°	33612.6	100.0
0°-180°	33612.6	100.0



REPORT NUMBER: P299269

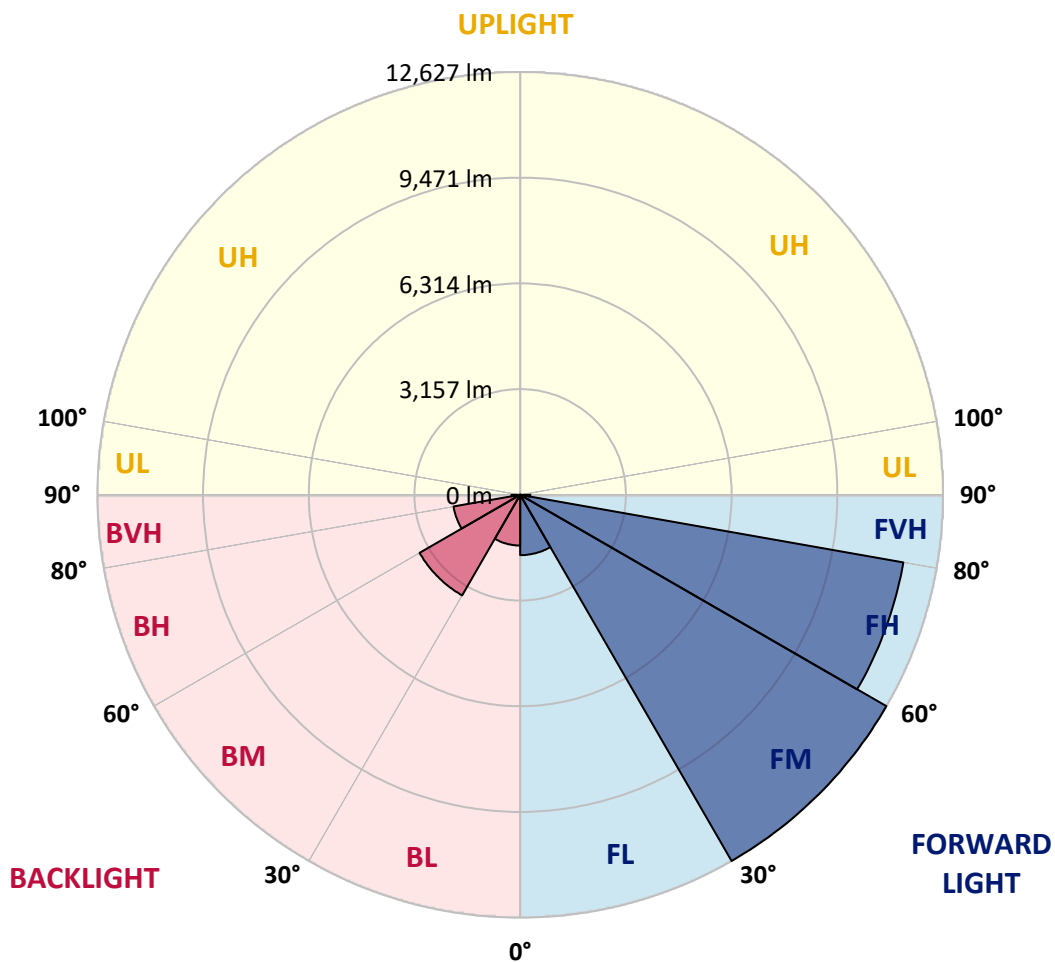
CATALOG NUMBER: GLNA-AF-10-LED-E1-T3-7027-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1801.7	5.4			
FM	(30°-60°)	12627.4	37.6			
FH	(60°-80°)	11620.1	34.6			G4/12000
FVH	(80°-90°)	302.4	0.9			G3/500
BL	(0°-30°)	1516.2	4.5	B3/2500		
BM	(30°-60°)	3467.8	10.3	B3/5000		
BH	(60°-80°)	2020.7	6.0	B3/2500		G3/2500
BVH	(80°-90°)	256.3	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-G4

Type III Short





REPORT NUMBER: P299269

CATALOG NUMBER: GLNA-AF-10-LED-E1-T3-7027-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4144.8	4144.8	4144.8	4144.8	4144.8	4144.8	4144.8	4144.8	4144.8	4144.8	4144.8
2.5°	4109.1	4110.7	4114.0	4126.9	4138.3	4135.1	4136.7	4130.2	4128.6	4118.8	4128.6
5°	4057.1	4062.0	4063.6	4084.7	4097.7	4101.0	4096.1	4088.0	4078.2	4068.5	4073.4
7.5°	3938.6	3951.6	3953.2	3982.5	4003.6	4031.2	4032.8	4034.4	4029.5	4023.0	4032.8
10°	3863.9	3867.2	3865.6	3886.7	3902.9	3933.7	3951.6	3982.5	3995.4	3998.7	4005.2
12.5°	3859.1	3855.8	3851.0	3851.0	3846.1	3859.1	3891.5	3935.4	3966.2	3976.0	3984.1
15°	3911.0	3909.4	3893.2	3868.8	3838.0	3828.2	3855.8	3904.5	3945.1	3966.2	3974.3
17.5°	4027.9	4018.2	3992.2	3937.0	3870.4	3844.5	3847.7	3888.3	3935.4	3963.0	3971.1
20°	4242.2	4242.2	4187.0	4083.1	3964.6	3902.9	3873.7	3898.0	3943.5	3980.8	3992.2
22.5°	4612.4	4615.6	4523.1	4352.6	4152.9	4021.4	3948.4	3943.5	3997.1	4039.3	4052.3
25°	5136.8	5123.8	4993.9	4750.4	4446.8	4229.2	4102.6	4073.4	4118.8	4165.9	4182.1
27.5°	5747.2	5700.1	5545.9	5252.0	4859.1	4540.9	4346.1	4299.0	4342.9	4396.4	4412.7
30°	6351.1	6302.4	6119.0	5797.5	5360.8	4958.2	4678.9	4602.6	4664.3	4740.6	4750.4
32.5°	6955.1	6955.1	6750.5	6375.5	5899.8	5456.6	5122.2	5031.2	5133.5	5226.1	5247.2
35°	7677.5	7680.8	7482.7	7031.4	6520.0	6050.8	5682.3	5615.7	5769.9	5834.9	5885.2
37.5°	8565.6	8583.5	8328.6	7783.1	7223.0	6729.4	6291.1	6200.2	6354.4	6531.4	6693.7
40°	9525.1	9547.8	9267.0	8594.8	8034.7	7518.4	7044.4	6880.4	7136.9	7474.6	7684.0
42.5°	10440.8	10557.6	10286.5	9594.9	8992.6	8458.5	7977.9	7739.2	8060.7	8570.5	8752.3
45°	11763.9	11848.3	11375.9	10749.2	10182.6	9585.2	8948.8	8697.1	9146.8	9789.7	9827.1
47.5°	12645.5	12582.2	12341.9	11952.2	11593.4	11035.0	10077.1	9801.1	10398.5	11155.1	10945.7
50°	13114.7	13134.1	13101.7	13124.4	13137.4	12786.7	11460.3	11082.0	11794.8	12708.8	12226.6
52.5°	13553.0	13423.1	13530.3	14062.8	14705.7	14575.8	12965.3	12570.8	13291.6	14432.9	13580.6
55°	13543.3	13345.2	13694.3	14634.3	16028.9	16178.2	14655.4	14200.8	14874.5	16282.1	15015.8
57.5°	13064.3	13074.1	13611.5	14842.1	16951.0	17684.8	16616.6	15934.7	16553.2	18155.6	16326.0
60°	12405.2	12494.5	13268.9	14808.0	17689.7	18920.3	19022.6	17803.3	18197.9	19858.7	17410.5
62.5°	11341.8	11436.0	12504.2	14454.1	17577.7	20110.3	21198.1	19923.6	19917.1	20891.2	17728.7
65°	9664.7	9637.1	10759.0	13130.9	16637.7	20990.3	23359.0	21756.6	21212.7	20907.5	17089.0
67.5°	7127.2	7003.8	7966.5	10000.8	13829.0	20004.8	24630.2	22711.2	21654.3	19532.4	15134.3
70°	3698.3	3575.0	4354.2	5839.7	9094.9	15613.2	23222.6	22217.6	20678.6	16373.0	11856.4
72.5°	1581.3	1560.2	1876.8	2561.9	4399.7	9005.6	18209.2	19230.4	17743.3	12199.0	8151.6
75°	1063.4	1056.9	1175.4	1396.2	1979.1	3654.5	11395.4	13650.4	12981.5	7563.9	4584.8
77.5°	834.5	826.4	896.2	1003.3	1282.6	1441.7	5057.2	7328.5	6783.0	3292.5	2006.7
80°	652.6	646.2	690.0	748.4	922.2	909.2	1664.1	2915.8	2256.7	1261.5	975.7
82.5°	514.7	514.7	550.4	552.0	654.3	620.2	868.6	1284.2	1126.7	735.4	597.4
85°	470.8	470.8	508.2	412.4	427.0	391.3	539.0	761.4	714.3	302.0	259.8
87.5°	237.0	230.5	427.0	365.3	232.2	207.8	263.0	368.5	396.1	167.2	129.9
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: P299269

CATALOG NUMBER: GLNA-AF-10-LED-E1-T3-7027-600

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4144.8	4144.8	4144.8	4144.8	4144.8	4144.8	4144.8	4144.8	4144.8	4144.8
2.5°	4125.3	4123.7	4126.9	4128.6	4141.6	4159.4	4167.5	4178.9	4185.4	4182.1
5°	4076.6	4079.9	4092.9	4102.6	4125.3	4154.5	4170.8	4183.8	4195.1	4190.3
7.5°	4036.0	4044.1	4063.6	4071.7	4084.7	4092.9	4091.2	4096.1	4105.8	4094.5
10°	4013.3	4023.0	4037.7	4026.3	3995.4	3951.6	3911.0	3889.9	3896.4	3888.3
12.5°	3990.6	4003.6	3992.2	3938.6	3852.6	3795.8	3764.9	3768.2	3782.8	3786.0
15°	3977.6	3982.5	3933.7	3833.1	3745.4	3737.3	3753.5	3750.3	3751.9	3751.9
17.5°	3977.6	3964.6	3873.7	3773.0	3735.7	3721.1	3670.7	3607.4	3579.8	3570.1
20°	3998.7	3964.6	3854.2	3787.6	3706.5	3581.4	3448.3	3331.4	3279.5	3264.9
22.5°	4062.0	4003.6	3909.4	3794.1	3563.6	3354.2	3143.1	3003.5	2909.3	2893.1
25°	4190.3	4125.3	4018.2	3708.1	3336.3	3037.6	2797.3	2641.4	2547.3	2534.3
27.5°	4414.3	4372.1	4076.6	3518.1	3034.3	2714.5	2492.1	2371.9	2302.1	2297.3
30°	4752.0	4730.9	4047.4	3237.3	2662.5	2401.2	2294.0	2224.2	2172.2	2170.6
32.5°	5291.0	5120.5	3951.6	2894.7	2323.2	2178.7	2134.9	2092.7	2052.1	2052.1
35°	5984.2	5435.5	3769.8	2527.8	2117.0	2055.4	2000.2	1933.6	1880.0	1876.8
37.5°	6799.2	5630.3	3443.5	2232.3	2019.6	1972.6	1891.4	1792.3	1698.2	1681.9
40°	7622.4	5688.8	2984.0	2050.5	1957.9	1889.8	1790.7	1673.8	1582.9	1578.0
42.5°	8377.3	5576.7	2496.9	1925.5	1896.3	1805.3	1701.4	1597.5	1526.1	1524.5
45°	9010.4	5286.1	2087.8	1807.0	1831.3	1729.0	1636.5	1552.1	1496.9	1485.5
47.5°	9606.3	4875.4	1800.5	1681.9	1766.4	1686.8	1608.9	1529.3	1475.8	1467.6
50°	10297.9	4432.2	1599.2	1560.2	1709.5	1672.2	1631.6	1548.8	1459.5	1449.8
52.5°	11135.6	4049.0	1441.7	1453.0	1665.7	1691.7	1690.1	1604.0	1448.2	1435.2
55°	12070.8	3623.7	1323.2	1365.4	1647.9	1727.4	1704.7	1656.0	1457.9	1438.4
57.5°	12991.3	3126.9	1240.4	1298.8	1621.9	1724.2	1634.9	1565.1	1480.6	1453.0
60°	13681.3	2459.6	1177.0	1240.4	1565.1	1670.6	1558.6	1466.0	1475.8	1454.7
62.5°	13726.7	1901.1	1100.7	1190.0	1479.0	1617.0	1508.2	1422.2	1496.9	1477.4
65°	12919.8	1436.8	1027.7	1130.0	1386.5	1582.9	1459.5	1397.8	1540.7	1519.6
67.5°	10877.5	1155.9	966.0	1068.3	1293.9	1511.5	1415.7	1375.1	1579.7	1542.3
70°	7852.9	985.5	905.9	993.6	1211.1	1430.3	1376.7	1334.5	1474.1	1415.7
72.5°	4834.8	854.0	837.7	894.6	1147.8	1345.9	1318.3	1258.2	1328.0	1280.9
75°	2414.2	740.3	761.4	797.1	1058.5	1250.1	1220.9	1160.8	1170.5	1160.8
77.5°	1155.9	633.2	672.1	699.7	943.3	1141.3	1110.5	1048.8	1037.4	1039.0
80°	732.2	529.3	566.6	586.1	842.6	1014.7	983.8	922.2	1052.0	975.7
82.5°	457.8	430.2	440.0	475.7	733.8	883.2	842.6	787.4	948.1	750.1
85°	253.3	300.3	313.3	344.2	565.0	738.7	698.1	628.3	563.4	553.6
87.5°	151.0	178.6	183.5	206.2	379.9	534.1	472.4	448.1	371.8	370.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)