

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: P299257

Luminaire Tested: **GLNA-AF-08-LED-E1-SL2-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299257
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)
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-SL2-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Narrow OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26655.6 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 257
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

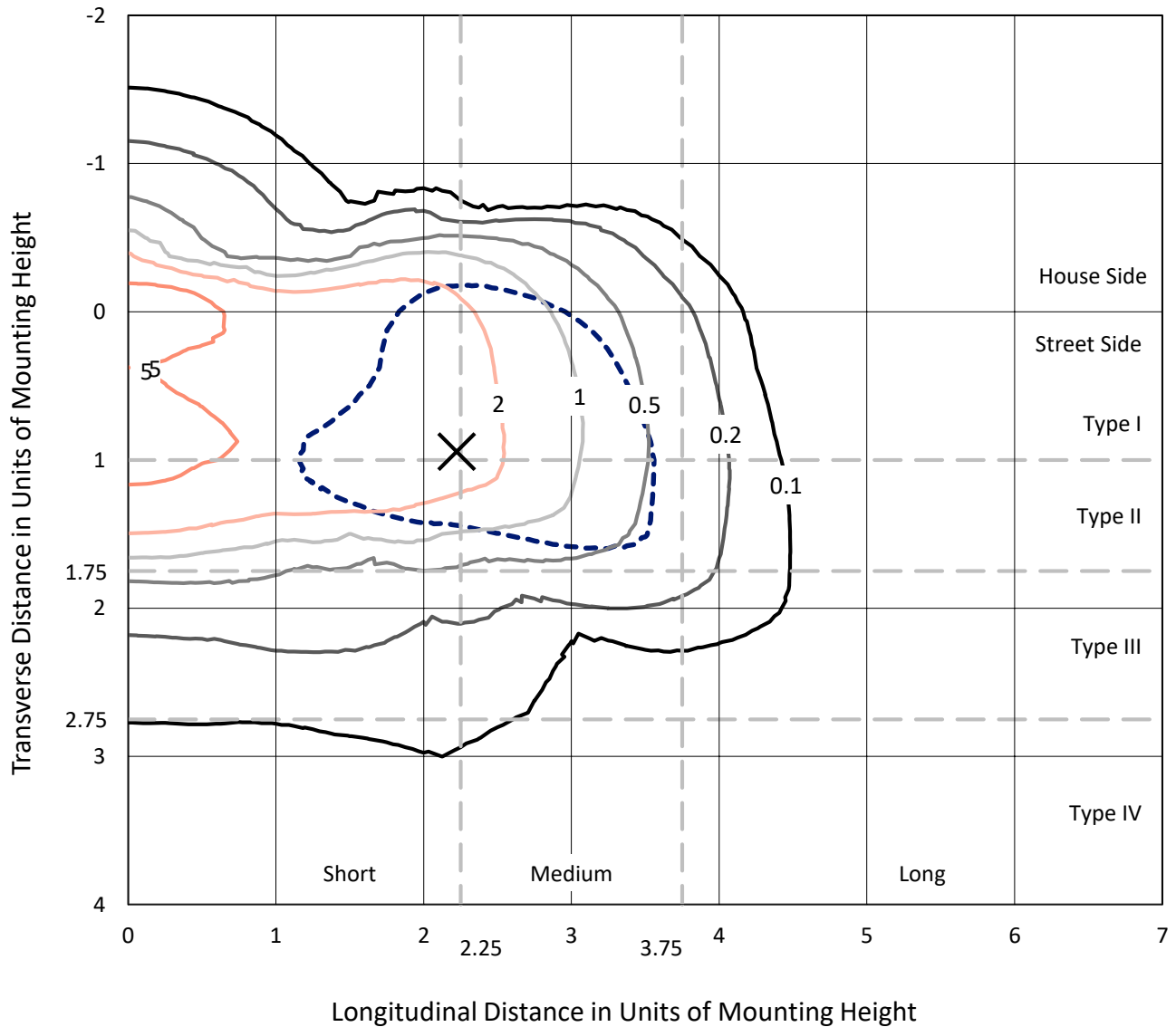


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Iso-Footcandle Lines of Horizontal Illumination

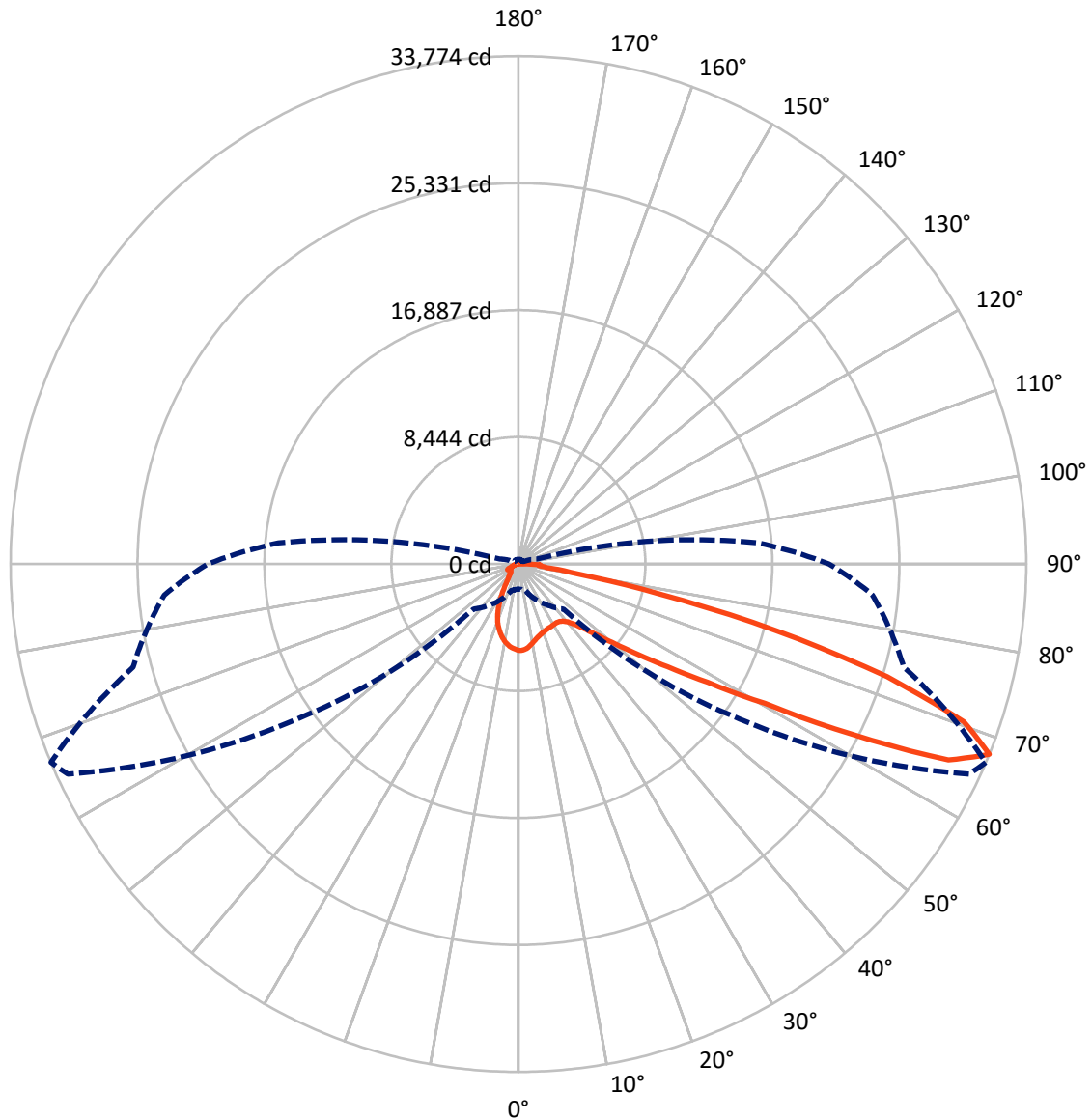
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4416.5	0.0	4416.5
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	22239.1	0.0	22239.1
	% Fixture	83.4	0.0	83.4
Total	Lumens	26655.6	0.0	26655.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	490.5	1.8
10°-20°	1135.0	4.3
20°-30°	1538.5	5.8
30°-40°	2187.1	8.2
40°-50°	3659.2	13.7
50°-60°	5788.8	21.7
60°-70°	7374.3	27.7
70°-80°	3862.7	14.5
80°-90°	619.5	2.3
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°	26655.6	100.0
0°-180°	26655.6	100.0

Coefficient of Utilization



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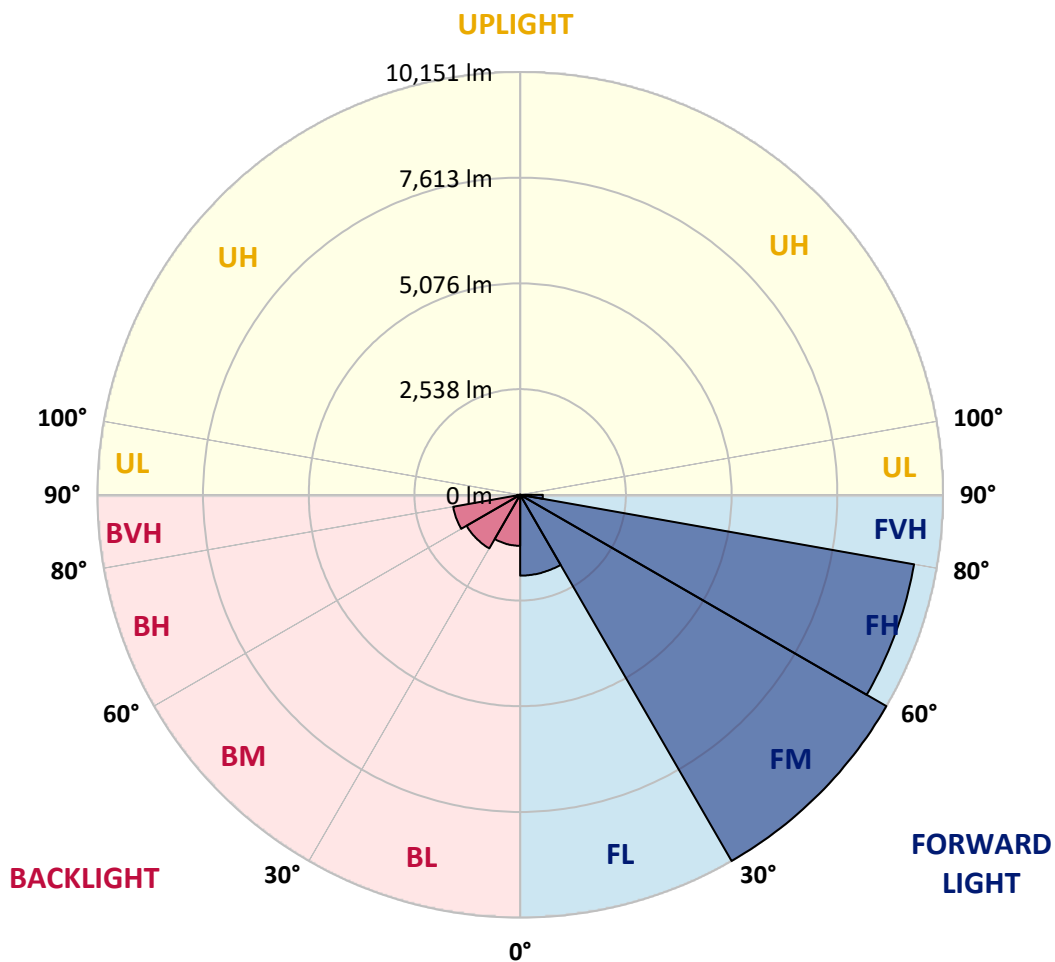
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1939.9	7.3			
FM	(30°-60°)	10151.0	38.1			
FH	(60°-80°)	9603.5	36.0			G4/12000
FVH	(80°-90°)	544.7	2.0			G4/750
BL	(0°-30°)	1224.1	4.6	B3/2500		
BM	(30°-60°)	1484.1	5.6	B2/2500		
BH	(60°-80°)	1633.5	6.1	B3/2500		G3/2500
BVH	(80°-90°)	74.8	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	5749.6	5749.6	5749.6	5749.6	5749.6	5749.6	5749.6	5749.6	5749.6	5749.6	5749.6
2.5°	5512.9	5522.1	5551.1	5569.5	5652.3	5687.8	5712.7	5737.7	5741.7	5753.5	5741.7
5°	4934.6	4954.3	5008.2	5068.7	5229.0	5355.2	5488.0	5626.0	5651.0	5740.4	5765.3
7.5°	4486.3	4481.1	4525.8	4598.1	4762.4	4937.2	5169.9	5444.6	5498.5	5699.6	5796.9
10°	4159.0	4155.1	4202.4	4277.3	4433.8	4599.4	4862.3	5238.2	5314.5	5635.2	5827.1
12.5°	3917.2	3918.5	3965.8	4048.6	4207.7	4374.6	4641.4	5038.4	5135.7	5560.3	5858.7
15°	3756.8	3767.3	3805.4	3893.5	4048.6	4215.6	4477.1	4888.6	4997.7	5501.1	5894.1
17.5°	3702.9	3720.0	3733.1	3797.5	3930.3	4097.2	4353.6	4778.2	4893.8	5460.4	5925.7
20°	3752.9	3772.6	3747.6	3769.9	3854.1	4001.3	4256.3	4691.4	4809.7	5414.4	5929.6
22.5°	3967.1	3985.5	3911.9	3847.5	3842.2	3931.6	4176.1	4623.0	4745.3	5380.2	5931.0
25°	4344.4	4356.2	4232.6	4082.8	3936.9	3906.6	4119.6	4575.7	4705.9	5350.0	5906.0
27.5°	4807.1	4816.3	4674.3	4453.5	4160.3	3965.8	4099.9	4548.1	4683.5	5323.7	5863.9
30°	5369.7	5413.0	5222.4	4943.8	4516.6	4140.6	4139.3	4533.7	4658.5	5279.0	5781.1
32.5°	5945.4	5963.8	5832.4	5549.8	4996.4	4448.2	4249.7	4544.2	4652.0	5225.1	5675.9
35°	6529.0	6552.7	6467.3	6239.9	5652.3	4899.1	4465.3	4606.0	4692.7	5206.7	5602.3
37.5°	7284.9	7316.4	7198.1	6935.2	6450.2	5510.3	4824.2	4761.1	4817.6	5259.3	5580.0
40°	8479.7	8465.3	8119.6	7727.9	7323.0	6292.4	5336.8	5024.0	5056.8	5428.8	5648.3
42.5°	9870.5	9835.0	9239.5	8624.3	8282.6	7238.9	6015.1	5480.1	5473.5	5762.7	5888.9
45°	10979.9	10951.0	10414.7	9656.2	9382.8	8316.7	6891.8	6159.7	6111.0	6292.4	6333.2
47.5°	11580.6	11581.9	11273.0	10653.9	10647.3	9686.4	8018.4	7142.9	7058.8	7144.2	7100.8
50°	11370.3	11397.9	11365.0	11167.9	11801.4	11482.0	9489.3	8513.9	8344.3	8428.5	8261.5
52.5°	10352.9	10388.4	10582.9	10885.2	12286.5	13652.2	11650.3	10217.5	10020.3	9990.1	9804.7
55°	8549.4	8592.8	8989.8	9811.3	11882.9	15110.0	15060.0	12389.0	12074.9	11789.6	11710.7
57.5°	5892.8	5965.1	6604.0	7823.8	10577.7	15550.4	19120.5	15484.6	14845.8	13849.4	13867.8
60°	3321.7	3405.8	4159.0	5267.1	7943.4	15071.9	22209.5	20173.4	18824.7	16261.5	16398.2
62.5°	2112.4	2203.1	2774.9	3659.5	4766.3	12495.5	23475.4	26691.9	24979.1	19234.9	19368.9
65°	1710.1	1749.6	2019.0	3020.7	3461.0	7528.1	22514.5	32061.6	31422.8	23008.7	22383.0
67.5°	1669.4	1682.5	1821.9	2535.6	3319.1	4231.3	17958.5	33065.9	33774.4	26532.9	23638.4
70°	1649.7	1695.7	2053.2	2420.0	3178.4	3568.8	10791.9	30313.3	31432.0	27454.3	21967.7
72.5°	800.5	797.9	1033.2	2188.6	3580.7	3701.6	5544.5	24527.0	25649.5	23785.6	18051.8
75°	645.4	590.2	563.9	801.8	3442.6	3822.5	3533.3	16876.7	17689.0	15947.3	11096.9
77.5°	612.5	546.8	500.8	502.1	1455.1	4053.9	2993.1	9340.7	9577.3	7203.4	3040.4
80°	507.4	446.9	414.1	466.6	704.6	3860.6	3236.3	4227.4	3879.0	1769.3	1012.2
82.5°	352.3	320.7	311.5	391.7	563.9	2751.2	3763.4	2271.4	1904.7	886.0	624.4
85°	224.8	191.9	212.9	285.2	439.0	1269.8	3876.4	1770.6	1407.8	562.6	352.3
87.5°	103.8	84.1	105.2	157.7	286.6	437.7	3688.4	1988.8	1449.9	297.1	222.1
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°	5749.6	5749.6	5749.6	5749.6	5749.6	5749.6	5749.6	5749.6	5749.6	5749.6	5749.6
2.5°	5752.2	5727.2	5707.5	5670.7	5629.9	5590.5	5555.0	5510.3	5497.2	5485.3	5503.7
5°	5770.6	5745.6	5673.3	5560.3	5435.4	5318.4	5201.4	5101.5	5039.7	5005.6	5025.3
7.5°	5798.2	5762.7	5612.8	5405.2	5180.4	4975.3	4763.7	4594.1	4469.2	4410.1	4427.2
10°	5823.2	5754.8	5510.3	5198.8	4870.2	4565.2	4231.3	3955.3	3750.2	3642.4	3668.7
12.5°	5833.7	5724.6	5367.0	4941.1	4490.3	4043.4	3551.7	3139.0	2844.5	2736.8	2714.4
15°	5844.2	5690.4	5209.3	4648.0	4031.5	3399.3	2710.5	2216.2	1971.7	1917.8	1906.0
17.5°	5846.8	5631.3	5030.5	4329.9	3493.9	2632.9	1853.4	1539.3	1540.6	1627.3	1637.8
20°	5819.2	5543.2	4813.6	3934.3	2849.8	1820.6	1272.4	1218.5	1417.0	1633.9	1660.2
22.5°	5756.1	5426.2	4567.8	3472.9	2112.4	1198.8	984.5	1043.7	1300.0	1565.6	1595.8
25°	5675.9	5284.2	4277.3	2937.9	1398.6	857.0	825.5	897.8	1071.3	1248.8	1265.8
27.5°	5566.8	5116.0	3951.3	2325.3	908.3	705.9	726.9	775.5	846.5	925.4	933.3
30°	5426.2	4914.9	3603.0	1695.7	686.2	634.9	665.1	691.4	721.7	766.3	770.3
32.5°	5264.5	4721.6	3245.5	1171.2	608.6	598.1	621.8	634.9	658.6	686.2	688.8
35°	5129.1	4537.6	2874.8	828.1	575.7	570.5	586.3	591.5	613.9	644.1	646.7
37.5°	5051.6	4387.7	2492.3	667.8	553.4	545.5	554.7	554.7	586.3	631.0	637.5
40°	5056.8	4304.9	2109.7	603.3	535.0	524.5	525.8	525.8	566.5	615.2	619.1
42.5°	5200.1	4326.0	1770.6	578.4	520.5	508.7	502.1	506.1	540.3	571.8	574.4
45°	5536.6	4474.5	1452.5	562.6	506.1	502.1	487.7	486.4	499.5	514.0	514.0
47.5°	6088.7	4767.6	1236.9	552.1	494.2	492.9	475.8	458.8	457.4	462.7	462.7
50°	6986.5	5272.4	1092.3	540.3	486.4	475.8	456.1	429.8	420.6	424.6	424.6
52.5°	8332.5	6172.8	1037.1	524.5	469.3	452.2	429.8	403.5	395.7	397.0	397.0
55°	10097.9	7555.7	1029.2	506.1	450.9	423.3	404.9	385.1	375.9	378.6	378.6
57.5°	12254.9	9468.2	1169.9	477.2	425.9	394.3	383.8	370.7	364.1	368.1	366.7
60°	14877.3	11971.0	1735.1	446.9	400.9	368.1	368.1	357.5	352.3	356.2	354.9
62.5°	17898.0	14845.8	2439.7	424.6	374.6	347.0	352.3	347.0	341.8	344.4	343.1
65°	20576.9	16718.9	2284.6	407.5	348.3	327.3	336.5	333.9	329.9	332.6	331.3
67.5°	20654.5	16024.9	1282.9	389.1	323.4	307.6	320.7	319.4	316.8	319.4	318.1
70°	18433.0	13531.3	723.0	354.9	297.1	283.9	302.3	301.0	298.4	303.6	302.3
72.5°	14768.2	9819.2	528.4	312.8	270.8	259.0	280.0	278.7	278.7	286.6	282.6
75°	8498.1	5052.9	421.9	268.2	243.2	234.0	252.4	253.7	256.3	266.8	259.0
77.5°	2422.6	1574.8	344.4	227.4	209.0	205.1	223.5	226.1	227.4	239.2	228.7
80°	900.4	725.6	283.9	190.6	170.9	172.2	189.3	193.2	194.5	206.4	193.2
82.5°	574.4	478.5	230.0	147.2	134.1	132.8	153.8	159.1	159.1	160.4	152.5
85°	335.2	286.6	173.5	106.5	94.6	90.7	114.4	123.6	119.6	117.0	111.7
87.5°	224.8	197.2	106.5	59.2	51.3	48.6	67.0	73.6	71.0	67.0	63.1
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)