

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: P299629

Luminaire Tested: **GLNA-AF-10-LED-E1-SL2-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299629
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
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-SL2-7027-HSS
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38514 lumens
Efficiency: N/A
Efficacy: 69.0 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 558
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

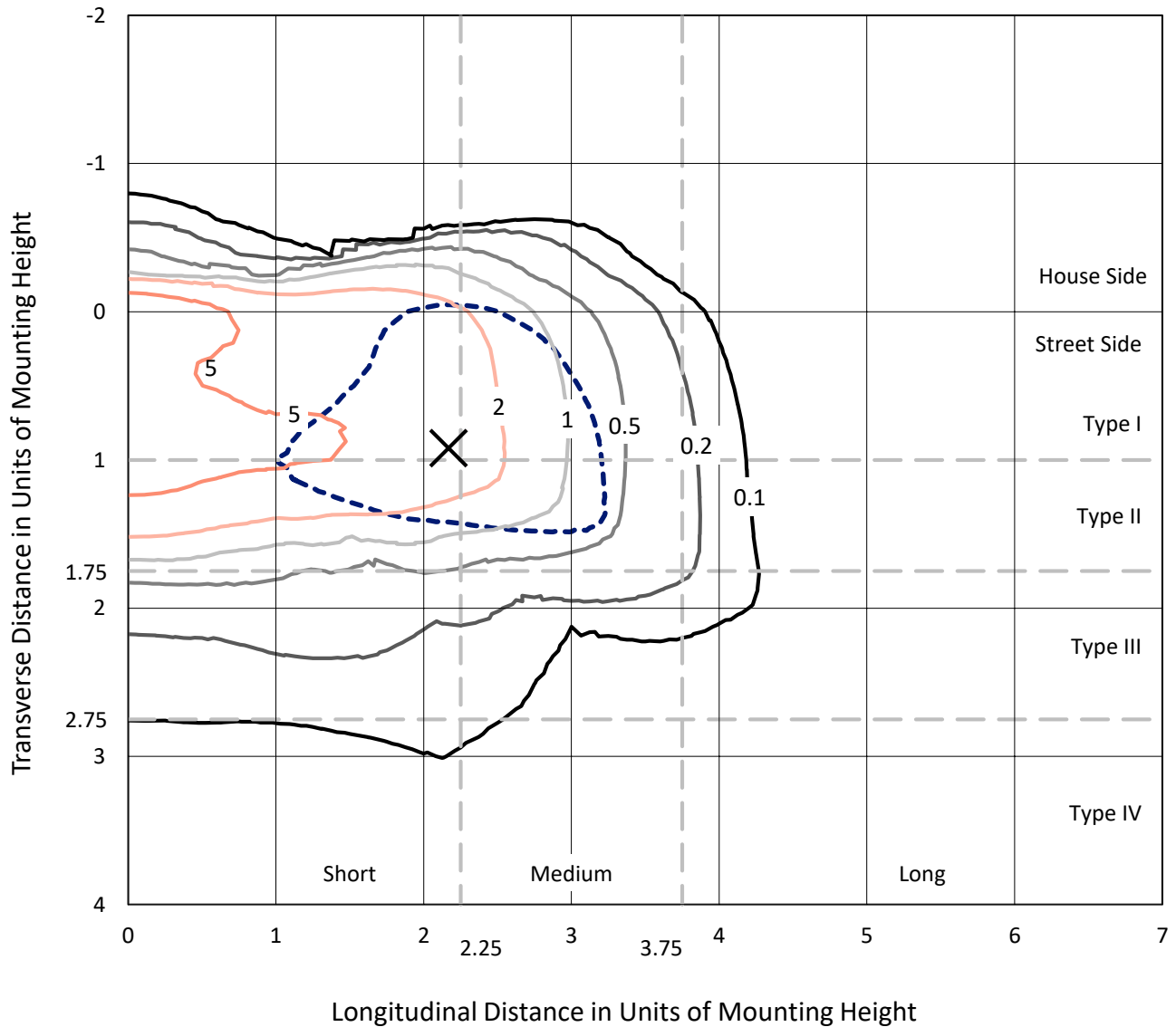


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Iso-Footcandle Lines of Horizontal Illumination

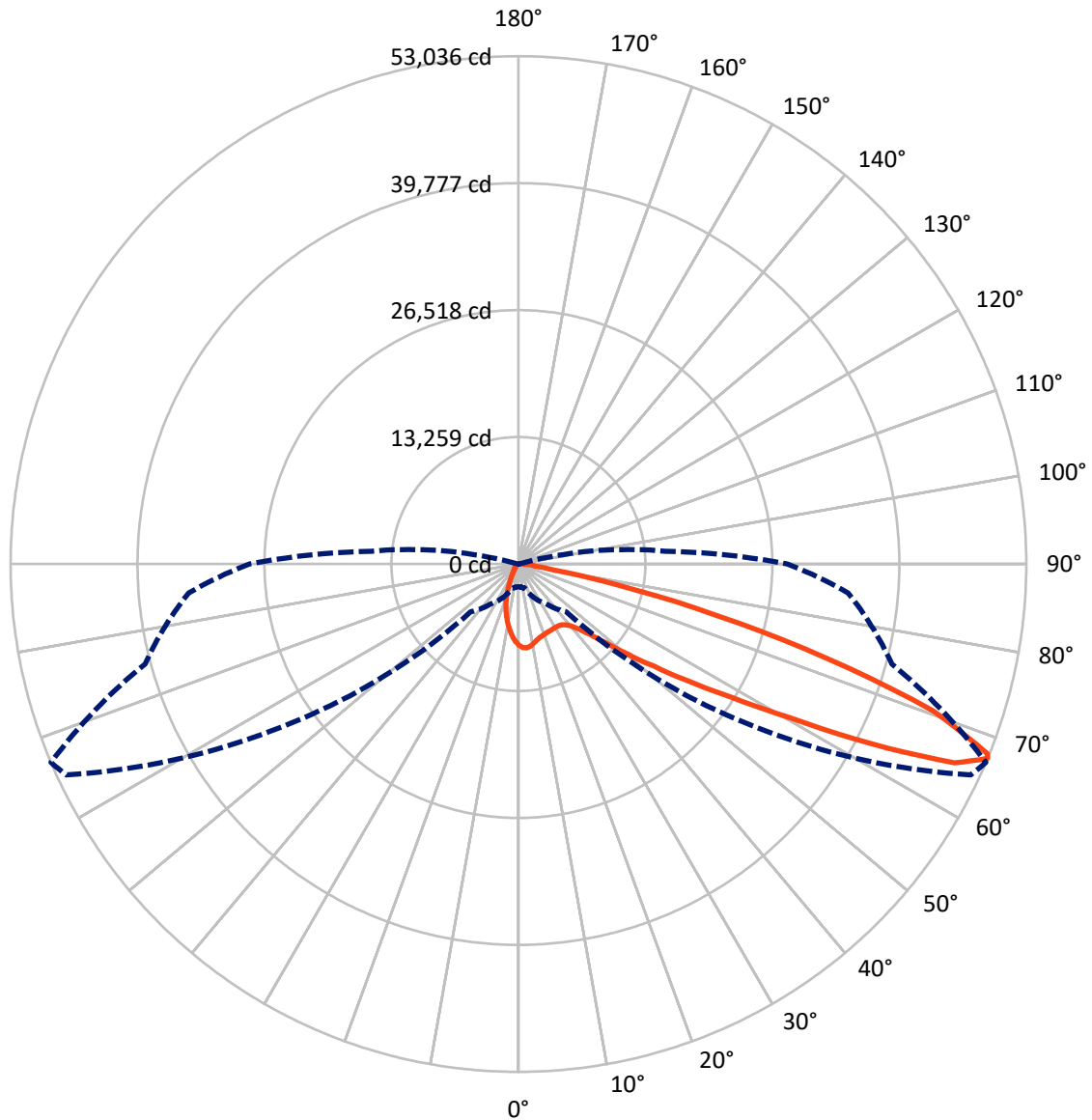
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.4 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3998.9	0.0	3998.9
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	34515.1	0.0	34515.1
	% Fixture	89.6	0.0	89.6
Total	Lumens	38514.0	0.0	38514.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	691.1	1.8
10°-20°	1471.0	3.8
20°-30°	2138.7	5.6
30°-40°	3336.4	8.7
40°-50°	5910.3	15.3
50°-60°	9352.4	24.3
60°-70°	10711.9	27.8
70°-80°	4443.2	11.5
80°-90°	459.0	1.2
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°	38514.0	100.0
0°-180°	38514.0	100.0

Coefficient of Utilization



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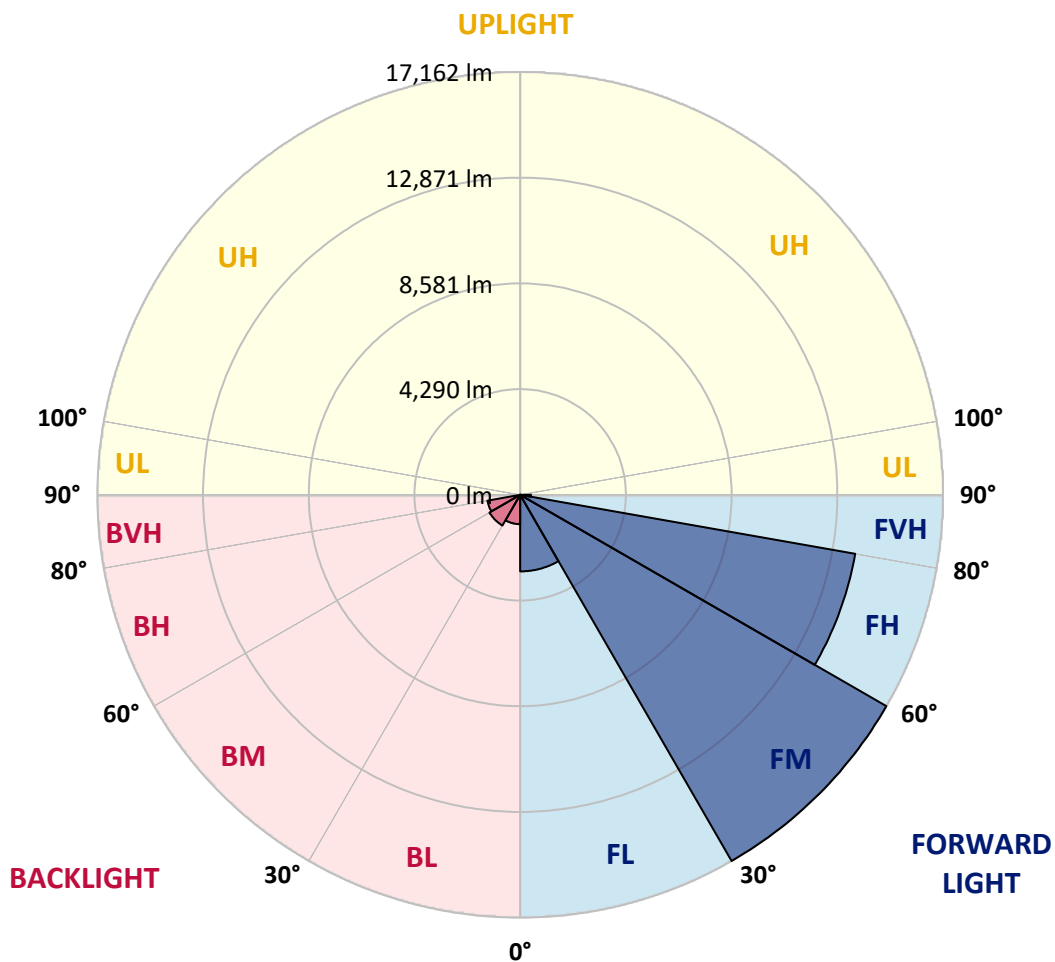
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3107.5	8.1			
FM (30°-60°)	17162.0	44.6			
FH (60°-80°)	13807.4	35.9			G5
FVH (80°-90°)	438.3	1.1			G3/500
BL (0°-30°)	1193.3	3.1	B3/2500		
BM (30°-60°)	1437.2	3.7	B2/2500		
BH (60°-80°)	1347.8	3.5	B3/2500		G3/2500
BVH (80°-90°)	20.7	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	8493.8	8493.8	8493.8	8493.8	8493.8	8493.8	8493.8	8493.8	8493.8	8493.8	8493.8
2.5°	8781.3	8799.3	8797.0	8810.5	8842.0	8844.2	8812.8	8752.1	8738.6	8660.0	8523.0
5°	8098.4	8150.1	8181.5	8309.6	8453.3	8626.3	8756.6	8803.8	8797.0	8740.9	8534.2
7.5°	7318.9	7370.5	7406.5	7557.0	7748.0	8044.5	8383.7	8662.2	8687.0	8747.6	8525.2
10°	6800.0	6808.9	6858.4	7002.1	7202.1	7505.3	7909.7	8397.2	8471.3	8693.7	8502.8
12.5°	6373.1	6379.9	6445.0	6600.0	6813.4	7118.9	7543.5	8107.4	8221.9	8626.3	8498.3
15°	6069.9	6094.6	6153.0	6314.7	6541.6	6844.9	7280.7	7894.0	8031.0	8601.6	8538.7
17.5°	5968.8	5995.7	6013.7	6130.5	6337.2	6633.7	7080.8	7754.7	7909.7	8615.1	8617.3
20°	6074.4	6094.6	6054.1	6083.3	6211.4	6476.5	6912.3	7635.6	7819.8	8630.8	8718.4
22.5°	6467.5	6476.5	6366.4	6238.3	6215.9	6361.9	6779.7	7541.3	7739.0	8673.5	8837.5
25°	7141.4	7125.7	6946.0	6669.7	6409.1	6341.7	6701.1	7482.9	7698.5	8718.4	8961.0
27.5°	7954.6	7977.1	7730.0	7327.9	6831.4	6476.5	6689.9	7458.2	7680.6	8749.9	9068.9
30°	8943.1	8974.5	8691.5	8186.0	7473.9	6808.9	6793.2	7453.7	7669.3	8729.6	9077.8
32.5°	9951.7	9989.9	9767.5	9246.3	8332.0	7366.1	7026.8	7503.1	7691.8	8660.0	9026.2
35°	11007.5	11061.4	10913.2	10466.1	9495.7	8170.3	7437.9	7653.6	7797.4	8653.3	8974.5
37.5°	12465.5	12514.9	12236.3	11762.3	10904.2	9248.6	8098.4	7936.7	8046.7	8761.1	8988.0
40°	14642.3	14635.5	13916.7	13191.1	12452.0	10618.9	9026.2	8448.8	8505.0	9086.8	9154.2
42.5°	17014.5	17003.3	15940.7	14837.7	14170.5	12306.0	10246.0	9333.9	9295.7	9686.6	9585.5
45°	18843.1	18840.8	17973.7	16731.4	16239.5	14242.4	11823.0	10565.0	10506.6	10661.6	10380.8
47.5°	19622.6	19636.1	19200.3	18326.4	18533.1	16861.7	13811.1	12348.6	12261.0	12198.1	11771.3
50°	19016.1	19043.0	19079.0	18908.2	20215.7	20381.9	16477.6	14862.4	14819.7	14538.9	13871.7
52.5°	17034.7	17171.7	17594.1	18135.5	20799.7	23760.5	20658.2	17984.9	17755.8	17457.0	16722.5
55°	13696.5	13847.0	14649.0	15963.2	19930.4	25980.0	26516.9	22010.6	21628.7	20736.8	19676.5
57.5°	9064.4	9298.0	10461.6	12133.0	17405.4	26337.2	32362.1	27597.4	26267.6	23825.7	22630.6
60°	4993.8	5218.5	6481.0	7995.1	12571.0	24571.5	36293.4	34871.4	32521.6	27278.4	26218.1
62.5°	3075.4	3196.7	4128.9	5537.5	7539.0	19393.5	37106.6	44012.1	41291.7	31724.1	30551.5
65°	2448.6	2500.3	2956.3	4526.6	5404.9	11535.4	34480.5	50980.6	50073.0	37106.6	34431.1
67°	2376.7	2396.9	2612.6	3886.3	5094.9	7071.8	28886.9	52115.0	53036.1	40363.9	34552.4
67.5°	2392.5	2414.9	2619.3	3708.9	5085.9	6498.9	26959.5	51668.0	52831.6	40622.3	34015.5
70°	2307.1	2376.7	2999.0	3706.6	4836.6	5400.4	16145.1	44766.9	45977.8	37744.6	28862.2
72.5°	817.7	822.2	1296.2	2999.0	5258.9	5458.8	8107.4	32818.2	33714.5	28873.4	20808.7
75°	485.2	413.3	431.3	853.6	5025.3	5301.6	4677.1	20970.5	21305.2	16545.0	10538.0
77.5°	334.7	292.0	301.0	377.4	1914.0	5227.5	3715.6	10935.6	10578.5	5802.5	2244.2
80°	190.9	168.5	179.7	330.2	696.4	4877.0	3504.4	4434.5	3780.7	983.9	620.0
82.5°	101.1	85.4	103.3	271.8	485.2	3039.4	3511.2	2143.1	1698.3	332.5	422.3
85°	35.9	29.2	49.4	186.5	323.5	932.3	3255.1	1801.6	1415.3	161.7	321.2
87.5°	6.7	6.7	20.2	76.4	130.3	285.3	1925.2	1069.3	716.6	96.6	220.2
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°	8493.8	8493.8	8493.8	8493.8	8493.8	8493.8	8493.8	8493.8	8493.8	8493.8	8493.8
2.5°	8466.8	8370.2	8239.9	8080.4	7891.7	7725.5	7601.9	7473.9	7446.9	7402.0	7395.3
5°	8410.6	8244.4	7920.9	7550.3	7154.9	6797.7	6507.9	6249.6	6135.0	6036.2	6024.9
7.5°	8327.5	8078.2	7527.8	6930.2	6312.5	5750.9	5274.6	4937.7	4627.7	4479.4	4456.9
10°	8230.9	7873.8	7085.3	6256.3	5402.7	4609.7	3902.1	3309.0	2949.6	2736.2	2709.2
12.5°	8141.1	7673.8	6633.7	5557.7	4423.2	3362.9	2453.1	1887.0	1509.6	1356.8	1338.9
15°	8098.4	7512.1	6211.4	4843.3	3398.9	2140.9	1341.1	1037.9	914.3	878.4	876.1
17.5°	8093.9	7375.0	5798.0	4104.2	2381.2	1244.5	873.9	797.5	772.8	763.8	763.8
20°	8091.7	7244.7	5384.7	3338.2	1511.9	828.9	727.8	709.9	691.9	680.7	680.7
22.5°	8116.4	7127.9	4953.4	2556.4	952.5	671.7	640.2	622.3	599.8	584.1	581.8
25°	8141.1	7038.1	4513.1	1819.6	689.7	584.1	552.6	527.9	496.5	476.2	474.0
27.5°	8145.6	6925.8	4041.3	1217.6	577.3	509.9	469.5	431.3	395.4	375.2	372.9
30°	8078.2	6737.1	3517.9	822.2	509.9	442.5	388.6	348.2	314.5	298.8	298.8
32.5°	7945.6	6503.4	2942.8	620.0	453.8	379.6	321.2	283.1	260.6	253.8	251.6
35°	7826.6	6251.8	2352.0	525.7	406.6	321.2	262.8	238.1	224.6	222.4	220.2
37.5°	7756.9	6049.6	1797.1	476.2	361.7	269.6	222.4	204.4	197.7	193.2	195.4
40°	7810.9	5881.2	1327.6	435.8	316.7	224.6	188.7	179.7	173.0	170.7	170.7
42.5°	8046.7	5852.0	986.2	399.9	274.1	186.5	164.0	157.3	152.8	150.5	152.8
45°	8666.7	6031.7	766.0	366.2	231.4	157.3	139.3	137.0	134.8	134.8	134.8
47.5°	9599.0	6402.3	638.0	328.0	193.2	134.8	121.3	119.1	116.8	119.1	119.1
50°	11178.3	7080.8	570.6	289.8	159.5	114.6	103.3	103.3	103.3	103.3	105.6
52.5°	13579.7	8415.1	525.7	251.6	130.3	96.6	87.6	87.6	89.9	89.9	92.1
55°	16255.2	10185.3	485.2	213.4	110.1	80.9	71.9	74.1	76.4	78.6	78.6
57.5°	19157.6	12146.5	451.5	175.2	94.4	65.1	60.7	62.9	65.1	69.6	69.6
60°	22659.8	14269.3	402.1	137.0	78.6	51.7	47.2	51.7	58.4	62.9	65.1
62.5°	26505.7	16322.6	339.2	107.8	65.1	40.4	38.2	47.2	56.2	60.7	62.9
65°	29134.0	16967.3	260.6	87.6	49.4	29.2	31.5	42.7	53.9	60.7	60.7
67°	28069.2	15383.6	213.4	74.1	40.4	22.5	29.2	42.7	53.9	58.4	60.7
67.5°	27330.1	14763.6	204.4	71.9	38.2	22.5	29.2	42.7	53.9	60.7	60.7
70°	22237.4	11090.6	170.7	53.9	31.5	20.2	24.7	40.4	51.7	58.4	58.4
72.5°	15451.0	6838.1	152.8	38.2	27.0	18.0	22.5	38.2	49.4	56.2	58.4
75°	7345.8	2475.6	130.3	29.2	24.7	15.7	20.2	38.2	49.4	56.2	56.2
77.5°	1498.4	575.1	105.6	24.7	20.2	15.7	18.0	35.9	47.2	53.9	53.9
80°	492.0	222.4	78.6	22.5	20.2	15.7	18.0	33.7	47.2	51.7	53.9
82.5°	354.9	112.3	51.7	22.5	20.2	15.7	15.7	33.7	44.9	51.7	51.7
85°	271.8	78.6	33.7	22.5	20.2	15.7	15.7	31.5	42.7	49.4	49.4
87.5°	179.7	31.5	27.0	22.5	20.2	15.7	15.7	31.5	40.4	47.2	49.4
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)