

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: P299825

Luminaire Tested: **GLNA-AF-02-LED-E1-SL3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299825
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-02-LED-E1-SL3-7050
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 5000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Medium OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12137.3 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

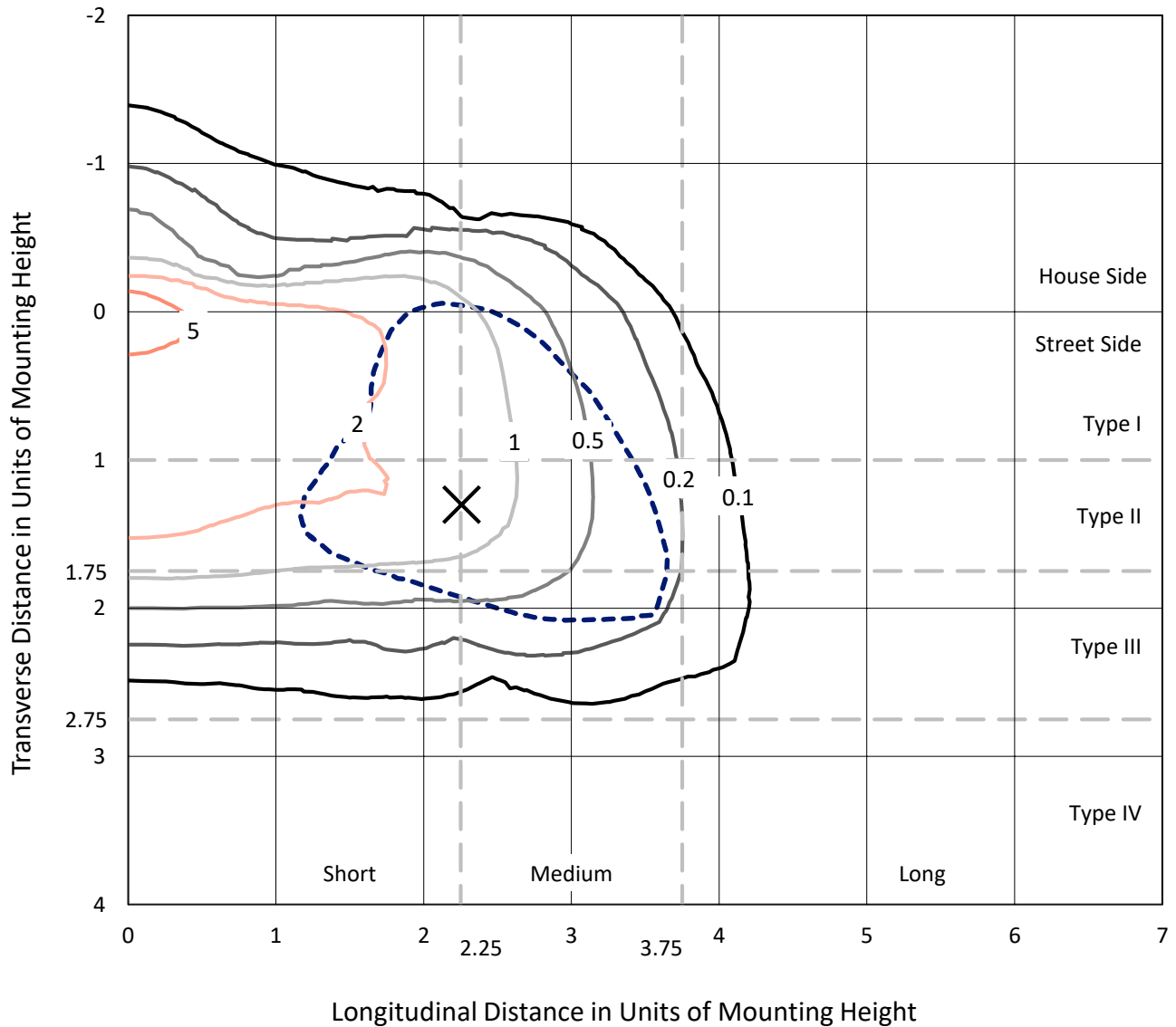
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

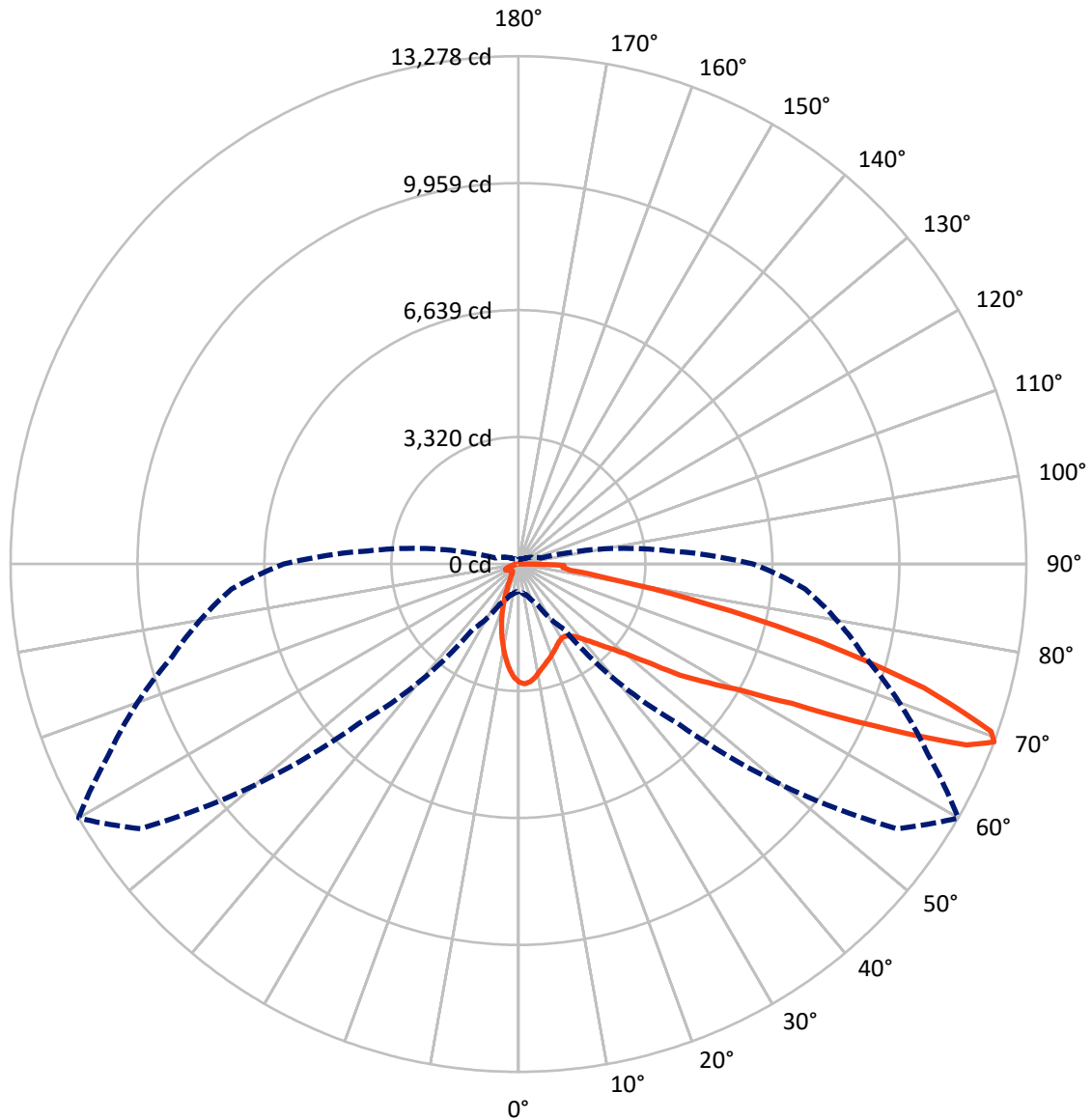
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.7 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1726.8	0.0	1726.8
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	10410.5	0.0	10410.5
	% Fixture	85.8	0.0	85.8
Total	Lumens	12137.3	0.0	12137.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.5	2.2
10°-20°	557.2	4.6
20°-30°	709.9	5.8
30°-40°	975.9	8.0
40°-50°	1583.6	13.0
50°-60°	2539.6	20.9
60°-70°	3380.1	27.8
70°-80°	1825.0	15.0
80°-90°	304.5	2.5
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°	12137.3	100.0
0°-180°	12137.3	100.0

Coefficient of Utilization



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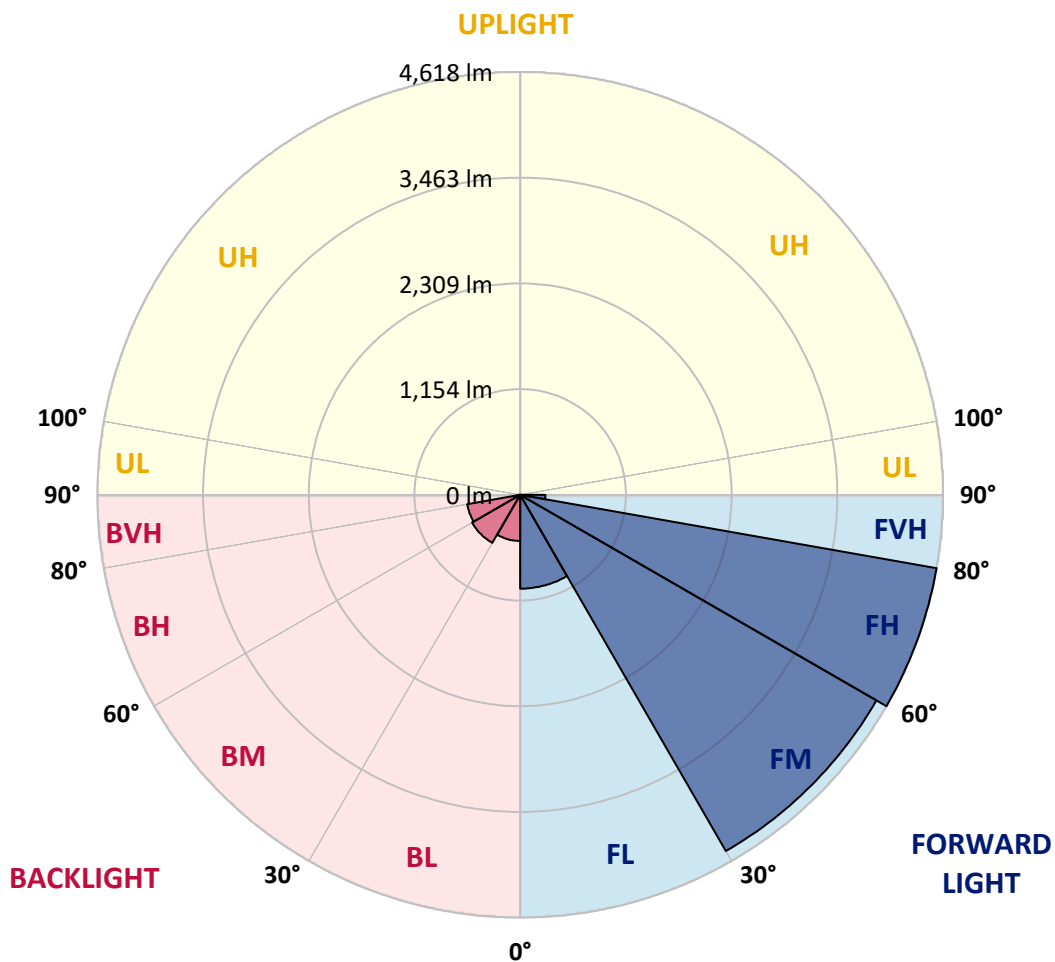
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1024.8	8.4			
FM (30°-60°)	4492.5	37.0			
FH (60°-80°)	4618.0	38.0			G2/5000
FVH (80°-90°)	275.2	2.3			G3/500
BL (0°-30°)	503.7	4.2	B2/1000		
BM (30°-60°)	606.6	5.0	B1/1000		
BH (60°-80°)	587.0	4.8	B2/1000		G2/1000
BVH (80°-90°)	29.3	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	3092.8	3092.8	3092.8	3092.8	3092.8	3092.8	3092.8	3092.8	3092.8	3092.8	3092.8
2.5°	3156.1	3163.1	3160.2	3158.4	3163.7	3155.5	3138.5	3133.2	3125.0	3105.7	3072.8
5°	3037.6	3058.7	3057.6	3073.4	3099.8	3106.8	3099.2	3100.4	3085.1	3061.1	3006.6
7.5°	2833.0	2841.8	2846.5	2881.1	2929.2	2967.9	3000.7	3011.3	3004.2	2983.7	2913.3
10°	2622.0	2629.0	2640.1	2680.6	2741.6	2794.9	2857.1	2892.8	2908.1	2904.6	2826.0
12.5°	2440.8	2447.8	2462.5	2508.2	2580.9	2646.6	2736.9	2781.4	2817.8	2839.5	2755.0
15°	2278.4	2293.6	2307.7	2360.5	2442.0	2528.1	2630.2	2686.4	2742.7	2791.4	2692.3
17.5°	2151.7	2167.0	2175.2	2223.3	2310.0	2415.6	2535.2	2601.4	2671.8	2751.5	2630.2
20°	2078.4	2085.5	2082.0	2108.9	2186.9	2298.9	2440.8	2517.6	2602.6	2714.0	2568.0
22.5°	2057.9	2058.5	2045.6	2042.7	2093.1	2187.5	2339.9	2433.2	2537.5	2689.4	2514.7
25°	2107.8	2106.0	2070.8	2042.1	2047.4	2102.5	2242.6	2351.1	2483.0	2684.1	2473.6
27.5°	2218.6	2223.9	2171.7	2117.7	2064.4	2062.6	2168.7	2283.1	2438.4	2708.1	2456.0
30°	2373.9	2382.7	2327.0	2258.4	2158.2	2075.5	2140.0	2242.6	2410.9	2758.0	2453.1
32.5°	2544.0	2553.4	2511.1	2439.0	2307.7	2155.3	2159.9	2246.1	2409.7	2827.7	2473.0
35°	2725.1	2735.7	2714.0	2653.0	2507.0	2302.4	2236.2	2303.0	2447.8	2934.5	2526.4
37.5°	2927.4	2943.8	2949.7	2891.7	2735.7	2496.5	2361.0	2410.9	2534.0	3082.8	2624.3
40°	3218.8	3241.7	3239.9	3156.7	2997.8	2758.6	2553.9	2566.8	2668.3	3281.0	2780.8
42.5°	3777.0	3781.7	3635.7	3454.5	3286.2	3034.1	2781.4	2770.9	2853.5	3531.9	3011.3
45°	4487.0	4467.6	4142.8	3792.8	3587.6	3350.7	3077.5	3025.9	3088.7	3837.9	3299.7
47.5°	5076.2	5031.7	4621.3	4138.1	3906.5	3694.9	3425.2	3334.9	3369.5	4185.0	3672.6
50°	5280.8	5247.4	4907.4	4425.4	4208.5	4114.7	3853.2	3725.4	3734.8	4599.0	4109.4
52.5°	5236.9	5232.2	5005.3	4614.8	4491.1	4555.6	4459.4	4286.5	4195.0	5058.6	4580.8
55°	5133.1	5143.1	5061.0	4835.3	4814.1	4981.2	5251.5	5123.7	4839.4	5522.4	5068.0
57.5°	4772.5	4798.3	4978.9	5112.6	5334.2	5582.8	5889.4	5853.1	5533.0	6023.7	5647.3
60°	3845.0	3904.8	4389.1	5058.6	5869.5	6646.9	6784.1	6699.7	6248.2	6645.8	6412.4
62.5°	2694.1	2756.2	3332.0	4379.7	5781.5	7848.9	8383.6	8019.5	7275.4	7562.2	7402.7
65°	1442.3	1472.2	1911.9	3038.8	4881.0	8096.9	10721.2	10167.1	8901.9	8692.0	8249.9
67.5°	795.6	812.0	980.3	1534.4	3126.2	7130.0	12210.4	12629.0	10934.6	9444.2	8095.7
69°	719.4	734.6	844.9	1162.1	2091.9	5895.3	12065.0	13278.0	11825.8	9369.7	7525.8
70°	703.6	717.6	816.7	1071.2	1693.2	4859.3	11577.8	13112.1	12038.0	9103.0	7028.6
72.5°	633.2	648.5	744.6	962.1	1447.0	2422.6	9171.0	11086.4	10929.3	7892.8	5331.3
75°	590.4	604.5	767.5	942.2	1385.4	1533.2	6046.0	8170.7	8034.1	5521.2	2874.6
77.5°	252.7	251.5	355.9	797.4	1406.0	1484.5	3248.7	5104.4	4657.0	2359.9	825.5
80°	168.9	165.9	168.9	234.5	1289.3	1492.7	1702.0	2590.9	1957.1	601.5	406.9
82.5°	145.4	143.1	148.3	143.1	453.2	1703.8	1447.0	1377.8	930.5	341.8	201.7
85°	97.9	93.8	127.8	128.4	214.0	1513.8	1629.9	1163.8	752.8	202.9	99.7
87.5°	46.9	45.7	74.5	90.9	125.5	615.0	1828.7	1192.5	759.3	103.8	47.5
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°	3092.8	3092.8	3092.8	3092.8	3092.8	3092.8	3092.8	3092.8	3092.8	3092.8	3092.8
2.5°	3062.9	3038.8	3015.4	2987.2	2957.9	2925.1	2908.7	2892.2	2888.1	2883.4	2867.0
5°	2978.4	2944.4	2885.8	2821.3	2753.3	2687.0	2636.6	2604.9	2580.9	2568.6	2546.9
7.5°	2869.4	2819.5	2716.9	2605.5	2491.2	2386.8	2296.6	2239.7	2185.7	2160.5	2131.8
10°	2765.6	2691.1	2531.7	2367.5	2203.3	2045.6	1897.3	1792.3	1699.1	1646.9	1610.0
12.5°	2676.5	2574.5	2353.4	2131.2	1906.1	1681.5	1459.3	1284.6	1138.6	1061.8	1022.5
15°	2589.7	2466.6	2184.0	1902.0	1612.9	1307.5	1015.5	817.3	696.5	648.5	632.0
17.5°	2511.1	2353.4	2014.0	1671.0	1310.4	941.0	682.5	573.4	527.1	511.3	506.0
20°	2426.1	2239.1	1837.5	1429.4	995.0	657.8	533.0	484.9	466.1	461.4	459.1
22.5°	2344.0	2126.5	1668.6	1170.8	714.7	507.7	457.9	438.0	435.0	439.1	439.1
25°	2274.3	2025.7	1486.3	900.6	524.7	427.4	409.8	405.1	416.3	431.5	434.5
27.5°	2222.1	1943.0	1292.2	664.9	418.0	371.7	371.1	378.8	406.3	435.6	441.5
30°	2186.3	1864.4	1084.7	479.6	350.6	327.2	336.5	353.0	393.4	435.0	446.2
32.5°	2168.2	1806.4	868.3	371.1	300.2	287.3	303.1	323.1	362.9	401.6	416.3
35°	2182.2	1763.6	664.3	309.6	265.0	255.0	271.5	290.8	314.3	330.7	341.8
37.5°	2235.0	1746.6	501.3	277.3	241.0	231.6	244.5	255.6	265.0	269.7	275.0
40°	2348.7	1764.8	401.6	260.9	227.5	215.8	221.0	225.1	231.0	235.7	238.0
42.5°	2516.4	1819.3	360.0	254.5	220.5	203.4	202.3	204.0	211.7	220.5	222.2
45°	2750.9	1915.5	357.1	258.6	216.9	193.5	188.2	190.5	202.3	215.8	218.1
47.5°	3050.5	2062.0	380.5	270.9	219.9	188.2	179.4	182.3	197.0	215.2	218.1
50°	3413.5	2266.7	419.8	289.0	232.8	189.4	176.5	178.2	193.5	213.4	216.3
52.5°	3842.1	2556.9	462.6	306.6	246.2	197.0	178.8	174.7	188.8	206.4	209.9
55°	4318.7	2929.2	506.6	322.5	253.3	206.4	183.5	170.0	180.0	194.7	197.6
57.5°	4903.8	3449.8	582.8	337.7	258.0	212.8	188.2	165.3	168.9	179.4	181.8
60°	5695.9	4186.2	717.1	362.9	268.5	215.2	187.6	161.2	157.7	163.6	164.8
62.5°	6645.2	4985.9	829.0	394.6	286.1	216.9	184.1	158.3	148.3	148.3	149.5
65°	7208.6	5199.9	766.9	421.0	300.8	215.2	180.0	155.4	141.3	134.8	135.4
67.5°	6730.8	4573.2	657.2	426.2	300.2	207.0	173.5	150.1	134.3	124.3	123.7
69°	6132.2	3945.8	608.0	412.2	286.1	196.4	165.3	144.2	129.0	118.4	117.8
70°	5649.6	3563.0	575.8	396.9	270.9	188.8	158.9	139.0	124.9	114.9	113.7
72.5°	4107.6	2334.7	491.9	341.2	223.4	158.3	137.2	122.0	111.4	105.5	104.4
75°	2052.7	1113.4	399.3	276.7	171.2	126.6	112.6	102.0	96.7	95.6	95.0
77.5°	674.2	510.1	285.5	206.4	127.2	99.1	90.9	83.3	82.1	85.6	84.4
80°	370.5	296.7	181.2	136.6	86.8	72.7	71.5	67.4	69.2	75.0	73.9
82.5°	188.8	154.2	112.0	82.1	58.6	52.2	56.9	54.5	56.9	62.1	61.6
85°	93.2	84.4	70.9	49.8	38.7	33.4	40.5	42.2	43.4	47.5	47.5
87.5°	53.9	49.8	37.5	23.5	19.3	17.6	23.5	22.9	27.0	29.3	28.7
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)