

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: STREETWORKS

Report Number: P321417

Luminaire Tested: **GAN-SA3D-827-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321417
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA3D-827-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14055 lumens
Efficiency: N/A
Efficacy: 73.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

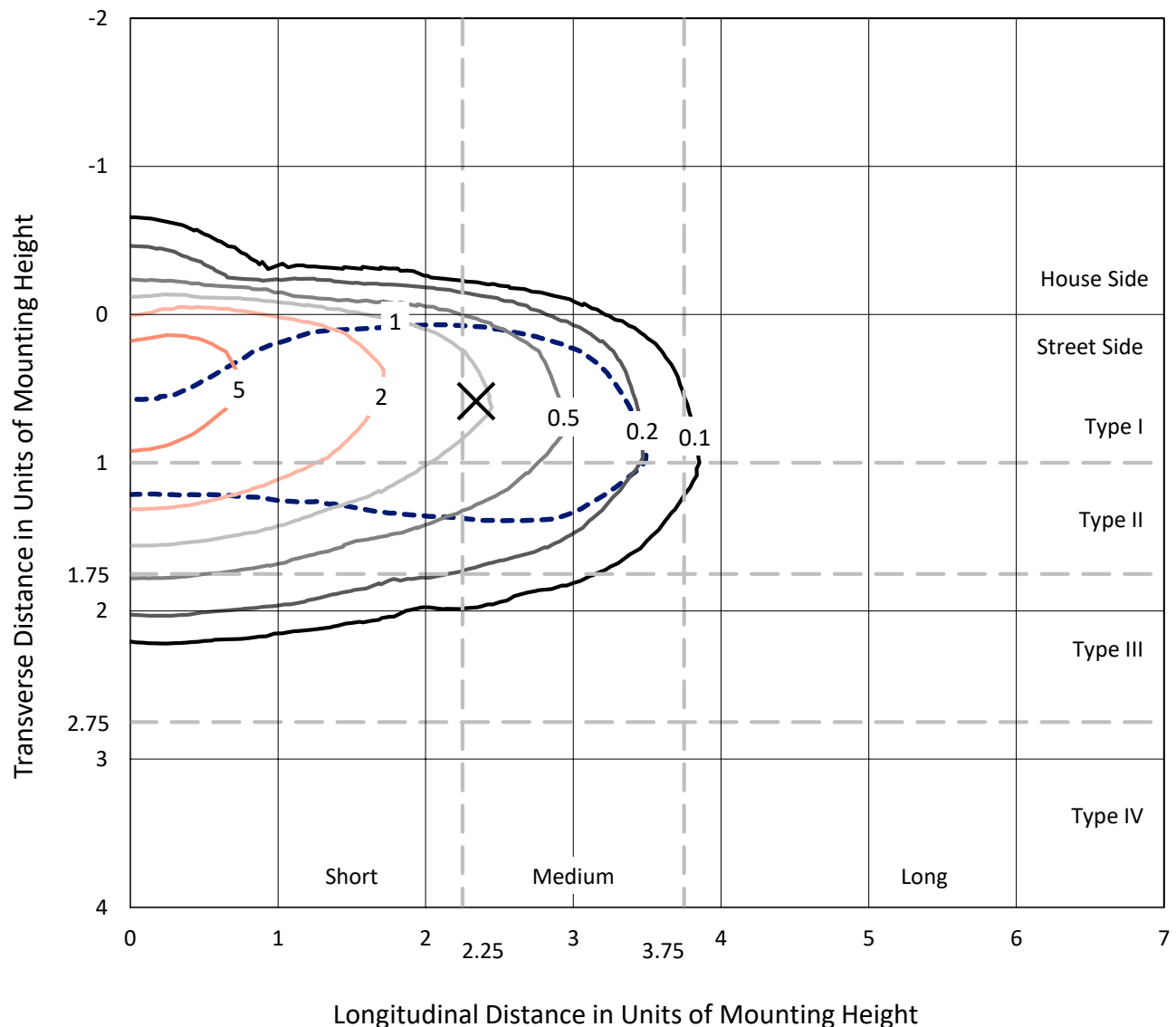
Input Watts (W): 191
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

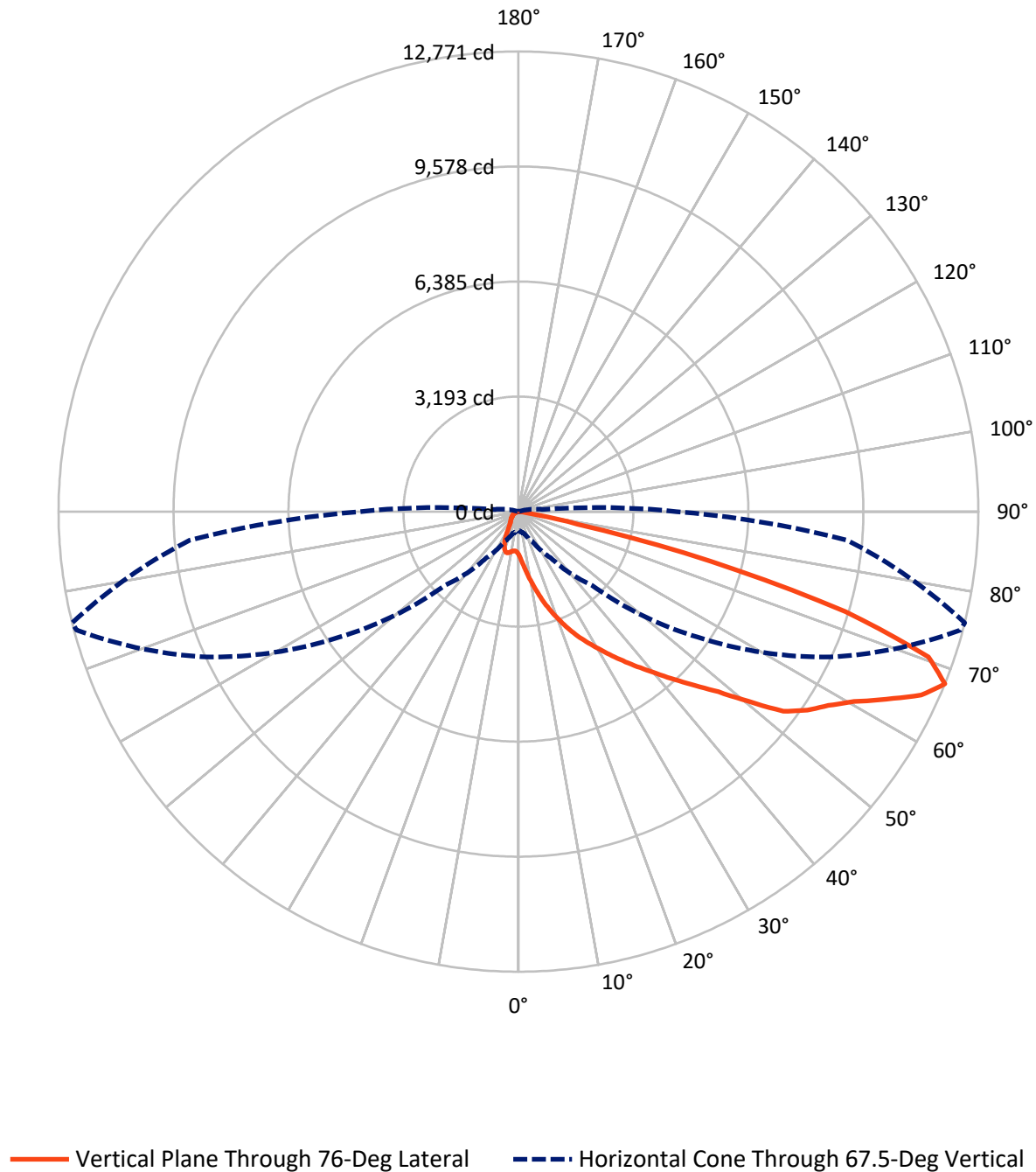
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	697.9	0.0	697.9
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	13357.1	0.0	13357.1
	% Fixture	95.0	0.0	95.0
Total	Lumens	14055.0	0.0	14055.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.3	1.1
10°-20°	587.7	4.2
20°-30°	1195.8	8.5
30°-40°	2075.5	14.8
40°-50°	2932.5	20.9
50°-60°	3325.5	23.7
60°-70°	2758.2	19.6
70°-80°	999.1	7.1
80°-90°	32.4	0.2
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°	14055.0	100.0
0°-180°	14055.0	100.0

Coefficient of Utilization



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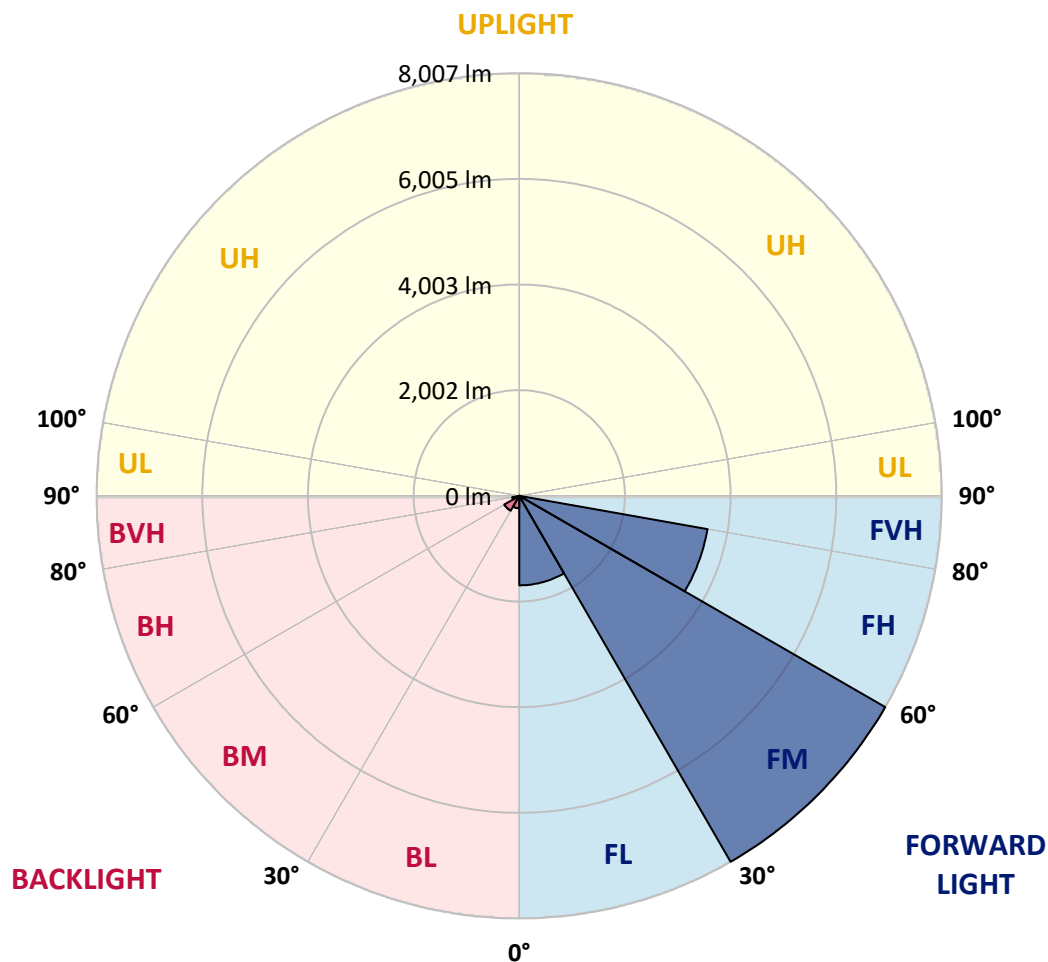
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1696.4	12.1			
FM	(30°-60°)	8006.9	57.0			
FH	(60°-80°)	3622.4	25.8			G2/5000
FVH	(80°-90°)	31.4	0.2			G1/100
BL	(0°-30°)	235.4	1.7	B1/500		
BM	(30°-60°)	326.7	2.3	B1/1000		
BH	(60°-80°)	134.9	1.0	B1/500		G1/500
BVH	(80°-90°)	1.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3
2.5°	1779.8	1739.8	1749.0	1723.1	1676.3	1580.3	1498.3	1420.7	1330.2	1327.1	1252.6
5°	2399.9	2366.1	2361.8	2309.4	2224.4	2061.2	1902.3	1721.3	1519.3	1504.5	1346.2
7.5°	2962.8	2935.7	2925.9	2863.7	2705.4	2546.5	2339.6	2073.5	1757.6	1730.5	1472.5
10°	3395.1	3382.2	3384.7	3340.3	3204.8	3057.0	2785.5	2446.1	2028.0	1986.1	1624.0
12.5°	3722.8	3725.8	3748.0	3720.9	3645.2	3535.6	3245.5	2843.3	2327.3	2270.0	1797.0
15°	3963.6	3979.0	4019.6	4053.5	4047.9	3953.1	3687.0	3246.7	2645.0	2581.6	1989.8
17.5°	4119.4	4136.6	4195.7	4270.9	4339.8	4317.7	4113.2	3635.9	2966.5	2893.2	2196.1
20°	4256.1	4276.4	4339.8	4439.0	4567.7	4595.4	4461.2	4013.4	3287.4	3198.1	2409.2
22.5°	4552.3	4551.7	4590.5	4648.4	4770.9	4842.4	4757.4	4363.9	3604.5	3511.5	2626.6
25°	5088.1	5067.8	5054.2	5008.6	5035.7	5080.1	5032.7	4691.5	3923.5	3829.3	2847.0
27.5°	5724.9	5737.2	5627.6	5505.0	5410.2	5364.6	5287.0	4995.1	4230.2	4126.8	3062.6
30°	6396.8	6400.5	6271.1	6114.7	5905.9	5732.9	5598.6	5285.2	4545.5	4432.8	3272.0
32.5°	7002.7	6978.7	6850.6	6637.6	6374.0	6179.4	5900.4	5609.1	4879.3	4770.3	3504.8
35°	7483.1	7454.8	7299.0	7105.0	6831.5	6635.7	6300.1	5932.4	5230.4	5123.8	3738.2
37.5°	7834.1	7800.9	7640.8	7441.2	7205.4	7091.4	6763.8	6284.1	5613.4	5498.9	3983.9
40°	7956.1	7927.1	7826.7	7680.8	7491.1	7465.2	7255.9	6688.7	6030.3	5908.4	4262.2
42.5°	7883.4	7855.1	7819.4	7770.1	7691.3	7715.9	7720.2	7149.9	6493.4	6373.4	4569.6
45°	7595.2	7569.9	7606.9	7678.9	7776.9	7898.8	8143.9	7645.7	7010.8	6882.7	4924.9
47.5°	7170.9	7152.4	7254.6	7434.5	7720.8	8057.1	8531.3	8166.7	7591.5	7472.6	5368.3
50°	6567.3	6564.3	6768.7	7097.0	7537.3	8133.4	8931.6	8759.1	8398.2	8273.2	5984.8
52.5°	5627.6	5633.7	6035.9	6561.2	7215.2	8081.7	9189.0	9520.3	9336.8	9206.8	6518.7
55°	4732.7	4769.7	5054.8	5812.3	6721.3	7889.6	9277.7	9875.7	9854.7	9731.5	6815.5
57.5°	3856.4	3923.5	4198.2	4905.8	6000.2	7446.8	9229.0	10029.6	10240.2	10146.0	7207.2
60°	2906.8	2937.6	3254.1	3915.5	5074.5	6638.8	8876.1	10113.4	10767.4	10702.1	7775.6
62.5°	1849.4	1926.4	2207.2	2845.2	3951.2	5516.7	8281.2	10112.1	11427.0	11462.7	8509.1
65°	974.3	1064.2	1213.2	1763.2	2715.2	4263.5	7386.4	10017.3	12236.2	12286.1	9082.4
67.5°	525.3	551.2	630.0	915.1	1574.7	2888.3	6071.6	9549.3	12704.8	12770.7	9162.5
70°	384.3	398.5	428.0	506.2	792.6	1677.6	4430.4	8488.2	12100.7	12076.1	8140.8
72.5°	295.0	317.2	339.3	370.7	455.7	895.4	2758.4	6646.8	9655.2	9492.6	6085.1
75°	232.8	236.5	267.9	296.2	341.8	509.9	1224.9	3871.2	5893.0	5508.1	3155.6
77.5°	186.0	188.4	206.9	231.6	274.7	335.0	379.4	1523.0	1881.4	1678.8	684.8
80°	110.2	116.4	154.0	178.6	227.9	211.2	138.6	330.7	293.8	266.0	115.2
82.5°	61.6	66.5	86.8	141.0	158.9	101.0	69.0	89.3	69.0	67.1	32.6
85°	0.0	3.1	56.0	87.4	64.7	22.2	28.9	29.6	20.3	19.1	12.9
87.5°	0.0	0.0	17.2	16.6	2.5	3.7	6.8	9.9	8.0	8.0	6.8
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°	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3	1192.3
2.5°	1215.7	1182.4	1119.6	1058.0	1006.3	963.8	925.6	910.2	897.9	896.1	886.2
5°	1269.9	1202.7	1082.7	984.1	918.2	871.4	831.4	806.8	787.7	780.3	773.5
7.5°	1351.8	1250.2	1077.7	964.4	885.6	806.8	732.9	652.8	602.9	583.8	572.7
10°	1451.5	1313.0	1096.2	958.9	820.9	654.6	532.1	430.5	389.2	375.7	372.0
12.5°	1567.9	1391.2	1128.2	924.4	683.0	465.0	367.0	332.6	323.3	319.0	319.0
15°	1701.6	1476.8	1151.0	824.6	505.0	351.6	317.8	301.8	291.9	286.4	287.0
17.5°	1838.3	1560.5	1139.9	679.9	372.6	312.8	287.6	270.4	256.8	251.3	250.0
20°	1976.2	1638.1	1078.3	506.2	315.3	283.9	255.6	236.5	222.9	217.4	216.2
22.5°	2119.1	1704.0	970.0	371.4	283.3	251.9	224.2	205.1	192.1	187.2	184.8
25°	2258.3	1757.6	818.5	300.5	253.1	221.7	195.2	177.4	165.7	160.7	160.1
27.5°	2388.2	1791.5	642.9	265.4	226.6	194.6	170.6	154.6	144.7	141.0	140.4
30°	2505.2	1794.6	475.4	239.6	203.2	171.2	149.0	134.9	126.2	122.6	121.3
32.5°	2623.5	1768.7	346.1	216.2	181.7	150.9	129.3	118.2	112.1	109.0	109.0
35°	2735.0	1709.0	269.7	195.8	160.7	131.2	113.9	105.9	102.2	99.2	99.2
37.5°	2844.0	1623.4	229.1	178.0	141.0	114.5	100.4	95.5	92.4	89.3	89.3
40°	2954.8	1515.6	208.2	161.4	125.0	101.6	89.3	85.0	81.9	79.4	78.8
42.5°	3090.9	1391.2	194.6	146.0	110.9	89.9	78.8	73.9	71.4	69.0	67.7
45°	3248.6	1284.0	183.5	130.6	99.2	80.1	68.4	63.4	59.7	56.7	56.0
47.5°	3475.8	1206.4	168.7	113.9	88.1	69.6	59.1	53.6	48.0	45.0	44.3
50°	3765.9	1142.4	149.6	99.2	77.0	59.1	49.3	42.5	37.6	34.5	34.5
52.5°	3910.0	1058.6	132.4	86.2	64.7	49.9	40.0	32.0	29.6	26.5	26.5
55°	3967.9	994.6	115.2	73.3	53.6	41.3	31.4	24.6	22.8	20.9	20.3
57.5°	4130.5	976.1	100.4	62.2	44.3	32.6	24.0	18.5	17.2	14.8	14.8
60°	4392.2	985.3	86.8	53.0	35.7	25.2	17.9	14.2	12.9	10.5	10.5
62.5°	4674.9	973.6	73.3	45.6	27.7	18.5	12.3	10.5	10.5	6.2	5.5
65°	4729.1	867.1	62.8	37.6	21.6	13.5	8.0	6.8	9.2	1.2	0.0
67.5°	4389.1	672.5	54.2	28.9	16.0	10.5	6.2	3.1	8.0	0.0	0.0
70°	3509.7	427.4	43.7	20.9	12.3	8.6	4.9	1.2	6.2	0.0	0.0
72.5°	2481.8	248.2	34.5	14.8	10.5	6.8	3.7	0.0	3.7	0.0	0.0
75°	1255.1	132.4	21.6	11.1	8.0	4.9	2.5	0.0	0.6	0.0	0.0
77.5°	271.6	61.6	13.5	8.0	5.5	3.1	1.2	0.0	0.0	0.0	0.0
80°	59.1	27.1	8.6	4.9	3.1	1.8	0.0	0.0	0.0	0.0	0.0
82.5°	21.6	14.2	4.3	2.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.7	7.4	2.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.2	2.5	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)