

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: P321458

Luminaire Tested: **GAN-SA4D-830-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321458
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-SA4D-830-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 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: 20077 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

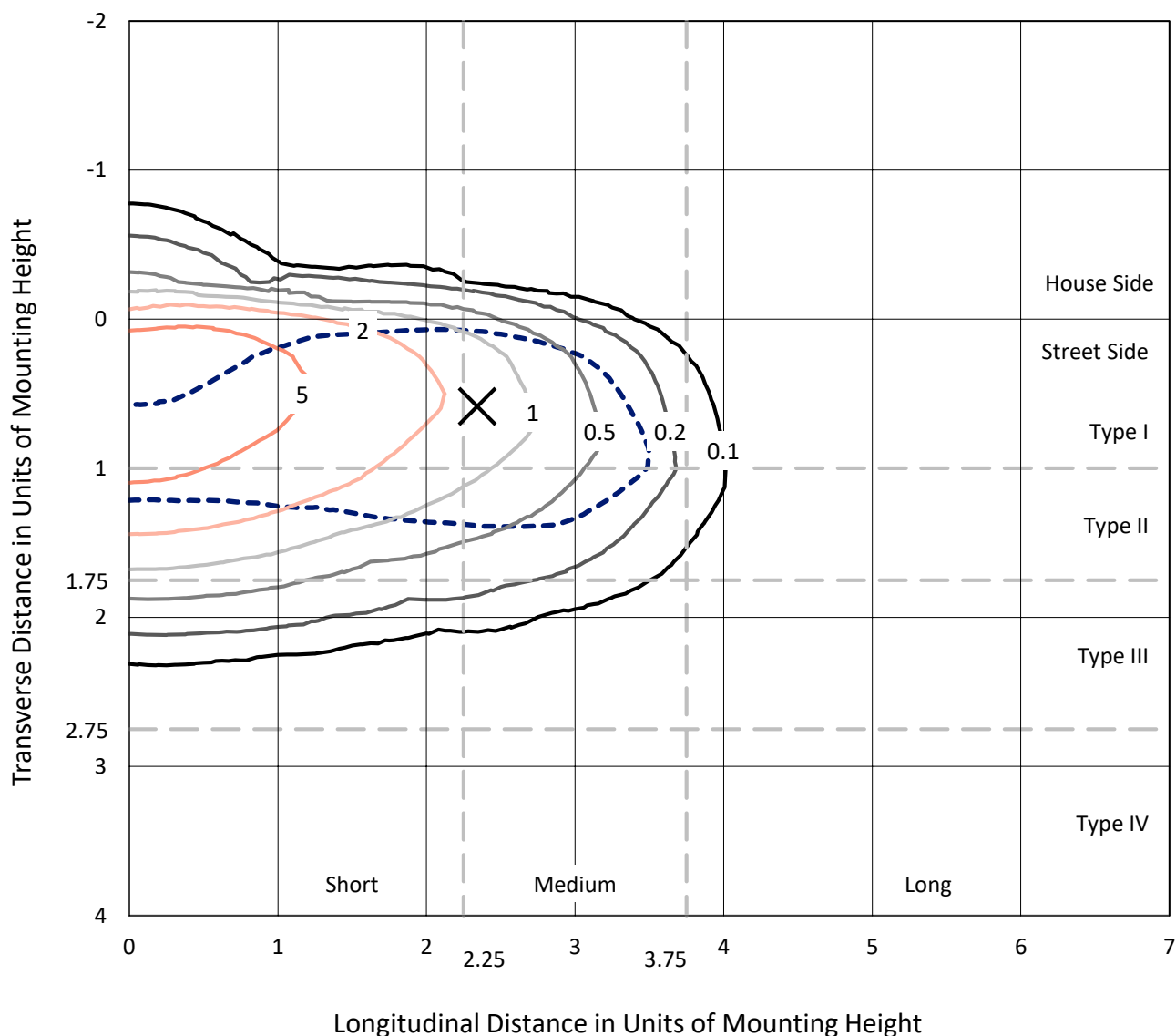
Input Watts (W): 258
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

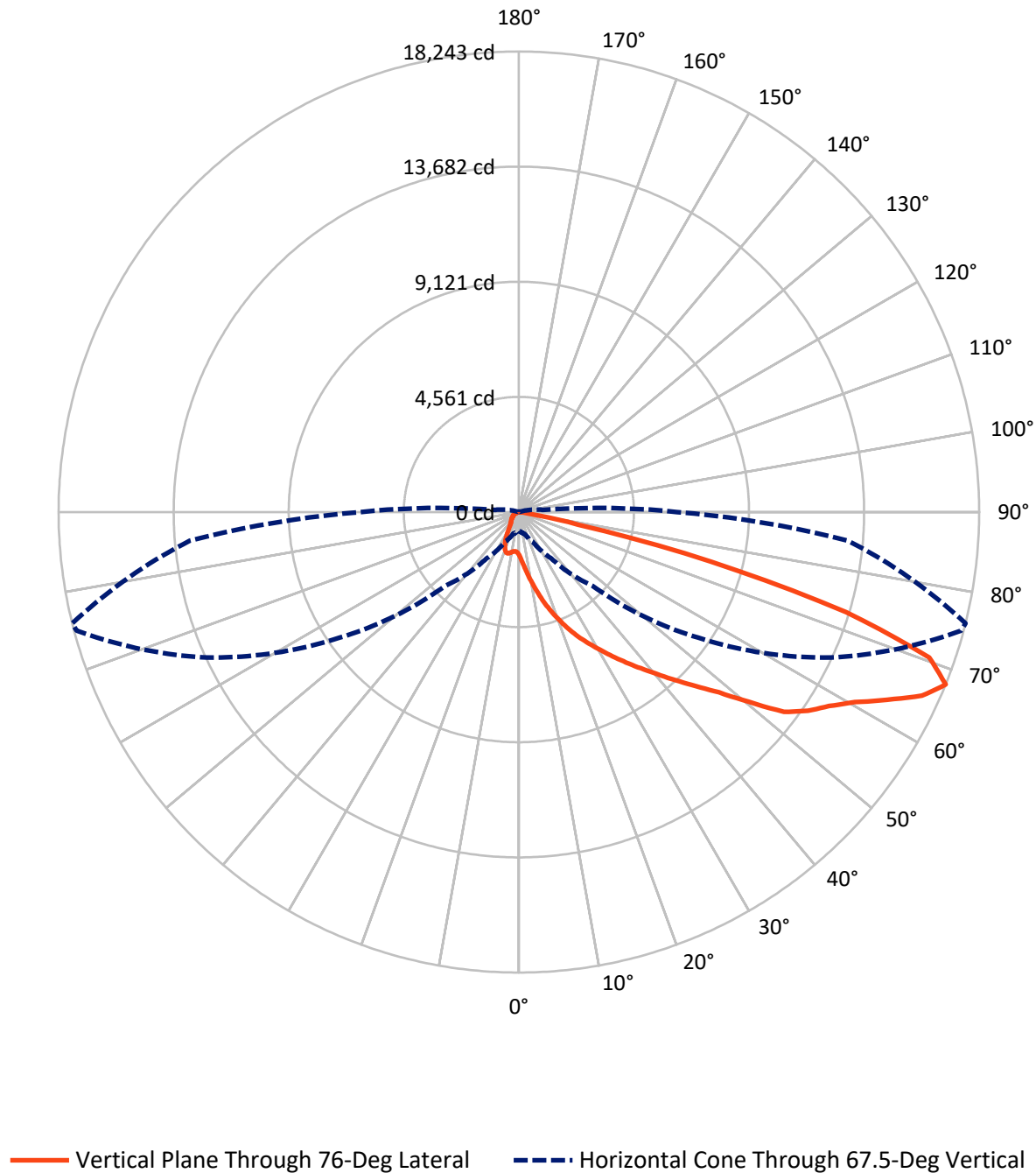
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 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	997.0	0.0	997.0
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	19080.0	0.0	19080.0
	% Fixture	95.0	0.0	95.0
Total	Lumens	20077.0	0.0	20077.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.8	1.1
10°-20°	839.5	4.2
20°-30°	1708.2	8.5
30°-40°	2964.8	14.8
40°-50°	4188.9	20.9
50°-60°	4750.4	23.7
60°-70°	3940.0	19.6
70°-80°	1427.2	7.1
80°-90°	46.3	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°	20077.0	100.0
0°-180°	20077.0	100.0

Coefficient of Utilization



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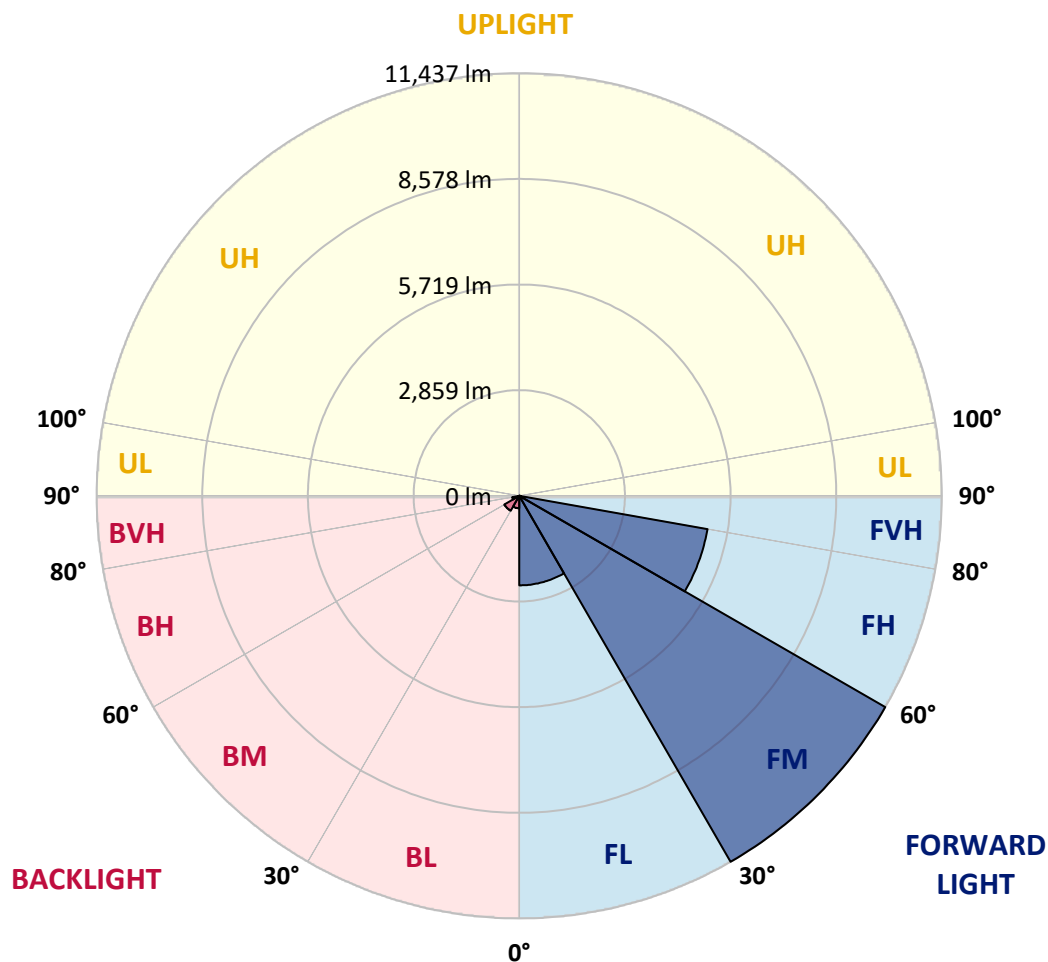
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2423.2	12.1			
FM	(30°-60°)	11437.5	57.0			
FH	(60°-80°)	5174.5	25.8			G3/7500
FVH	(80°-90°)	44.8	0.2			G1/100
BL	(0°-30°)	336.2	1.7	B1/500		
BM	(30°-60°)	466.6	2.3	B1/1000		
BH	(60°-80°)	192.7	1.0	B1/500		G1/500
BVH	(80°-90°)	1.5	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-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1703.1	1703.1	1703.1	1703.1	1703.1	1703.1	1703.1	1703.1	1703.1	1703.1	1703.1
2.5°	2542.4	2485.2	2498.4	2461.4	2394.6	2257.3	2140.3	2029.5	1900.2	1895.8	1789.3
5°	3428.2	3379.8	3373.7	3298.9	3177.5	2944.4	2717.4	2458.8	2170.2	2149.1	1923.0
7.5°	4232.3	4193.6	4179.5	4090.6	3864.5	3637.6	3342.0	2962.0	2510.7	2472.0	2103.4
10°	4849.8	4831.3	4834.9	4771.5	4578.0	4366.9	3978.9	3494.2	2896.9	2837.1	2319.8
12.5°	5317.8	5322.2	5353.9	5315.2	5207.0	5050.4	4636.1	4061.6	3324.4	3242.6	2567.0
15°	5661.8	5683.8	5741.8	5790.2	5782.3	5646.8	5266.8	4637.8	3778.3	3687.7	2842.3
17.5°	5884.4	5909.0	5993.4	6100.8	6199.3	6167.6	5875.6	5193.8	4237.5	4132.9	3137.0
20°	6079.6	6108.7	6199.3	6340.9	6524.8	6564.4	6372.6	5733.0	4695.9	4568.3	3441.4
22.5°	6502.8	6501.9	6557.3	6640.0	6815.1	6917.1	6795.7	6233.6	5148.9	5016.1	3751.9
25°	7268.1	7239.1	7219.7	7154.7	7193.4	7256.7	7189.0	6701.6	5604.6	5470.0	4066.9
27.5°	8177.7	8195.3	8038.8	7863.7	7728.2	7663.1	7552.3	7135.3	6042.7	5894.9	4374.8
30°	9137.5	9142.8	8958.0	8734.6	8436.4	8189.2	7997.4	7549.6	6493.1	6332.1	4673.9
32.5°	10003.1	9968.8	9785.9	9481.5	9105.0	8827.0	8428.5	8012.4	6969.9	6814.2	5006.4
35°	10689.3	10648.8	10426.3	10149.2	9758.6	9478.8	8999.4	8474.2	7471.3	7319.2	5339.8
37.5°	11190.7	11143.2	10914.5	10629.5	10292.6	10129.8	9661.8	8976.5	8018.5	7854.9	5690.8
40°	11364.9	11323.6	11180.2	10971.7	10700.7	10663.8	10364.7	9554.5	8614.1	8439.9	6088.4
42.5°	11261.1	11220.7	11169.6	11099.3	10986.6	11021.8	11028.0	10213.4	9275.6	9104.1	6527.4
45°	10849.4	10813.3	10866.1	10969.1	11108.9	11283.1	11633.2	10921.6	10014.6	9831.6	7035.0
47.5°	10243.3	10216.9	10362.9	10619.8	11028.9	11509.2	12186.6	11665.8	10844.1	10674.4	7668.4
50°	9381.2	9376.8	9668.9	10137.7	10766.7	11618.3	12758.4	12512.1	11996.6	11818.0	8549.0
52.5°	8038.8	8047.6	8622.0	9372.4	10306.6	11544.4	13126.1	13599.4	13337.2	13151.6	9311.7
55°	6760.5	6813.3	7220.6	8302.7	9601.1	11269.9	13252.8	14107.0	14077.1	13901.1	9735.7
57.5°	5508.7	5604.6	5997.0	7007.7	8571.0	10637.4	13183.3	14326.9	14627.8	14493.2	10295.2
60°	4152.2	4196.2	4648.4	5593.2	7248.8	9483.2	12679.2	14446.5	15380.8	15287.5	11107.2
62.5°	2641.8	2751.7	3152.9	4064.2	5644.2	7880.4	11829.4	14444.8	16322.9	16374.0	12154.9
65°	1391.7	1520.1	1733.0	2518.6	3878.6	6090.2	10551.2	14309.3	17478.9	17550.1	12973.9
67.5°	750.4	787.3	899.9	1307.2	2249.4	4125.8	8673.0	13640.7	18148.3	18242.5	13088.3
70°	548.9	569.2	611.4	723.1	1132.2	2396.3	6328.6	12125.0	17285.3	17250.2	11628.8
72.5°	421.4	453.0	484.7	529.6	651.0	1279.1	3940.2	9494.7	13792.0	13559.8	8692.4
75°	332.5	337.8	382.7	423.1	488.2	728.4	1749.7	5529.8	8417.9	7868.1	4507.6
77.5°	265.7	269.2	295.6	330.8	392.3	478.6	541.9	2175.5	2687.5	2398.1	978.2
80°	157.5	166.3	219.9	255.1	325.5	301.7	197.9	472.4	419.6	380.0	164.5
82.5°	88.0	95.0	124.0	201.5	227.0	144.3	98.5	127.6	98.5	95.9	46.6
85°	0.0	4.4	80.1	124.9	92.4	31.7	41.3	42.2	29.0	27.3	18.5
87.5°	0.0	0.0	24.6	23.8	3.5	5.3	9.7	14.1	11.4	11.4	9.7
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°	1703.1	1703.1	1703.1	1703.1	1703.1	1703.1	1703.1	1703.1	1703.1	1703.1	1703.1
2.5°	1736.5	1689.0	1599.3	1511.3	1437.4	1376.7	1322.2	1300.2	1282.6	1280.0	1265.9
5°	1814.0	1718.1	1546.5	1405.8	1311.6	1244.8	1187.6	1152.4	1125.1	1114.6	1104.9
7.5°	1931.0	1785.8	1539.5	1377.6	1265.0	1152.4	1046.9	932.5	861.2	834.0	818.1
10°	2073.5	1875.5	1565.9	1369.7	1172.6	935.1	760.1	614.9	556.0	536.6	531.3
12.5°	2239.7	1987.3	1611.6	1320.4	975.6	664.2	524.3	475.0	461.8	455.7	455.7
15°	2430.6	2109.5	1644.2	1177.9	721.4	502.3	453.9	431.1	417.0	409.1	409.9
17.5°	2625.9	2229.2	1628.3	971.2	532.2	446.9	410.8	386.2	366.8	358.9	357.2
20°	2823.0	2340.0	1540.4	723.1	450.4	405.5	365.1	337.8	318.5	310.5	308.8
22.5°	3027.1	2434.1	1385.5	530.5	404.7	359.8	320.2	292.9	274.5	267.4	263.9
25°	3225.9	2510.7	1169.1	429.3	361.6	316.7	278.9	253.4	236.6	229.6	228.7
27.5°	3411.5	2559.1	918.4	379.2	323.7	278.0	243.7	220.8	206.7	201.5	200.6
30°	3578.6	2563.5	679.1	342.2	290.3	244.6	212.9	192.7	180.3	175.1	173.3
32.5°	3747.5	2526.5	494.4	308.8	259.5	215.5	184.7	168.9	160.1	155.7	155.7
35°	3906.8	2441.2	385.3	279.7	229.6	187.4	162.7	151.3	146.0	141.6	141.6
37.5°	4062.5	2318.9	327.3	254.2	201.5	163.6	143.4	136.4	132.0	127.6	127.6
40°	4220.8	2165.0	297.3	230.5	178.6	145.2	127.6	121.4	117.0	113.5	112.6
42.5°	4415.2	1987.3	278.0	208.5	158.3	128.4	112.6	105.6	102.0	98.5	96.8
45°	4640.4	1834.2	262.2	186.5	141.6	114.4	97.6	90.6	85.3	80.9	80.1
47.5°	4965.1	1723.3	241.0	162.7	125.8	99.4	84.5	76.5	68.6	64.2	63.3
50°	5379.4	1631.9	213.8	141.6	110.0	84.5	70.4	60.7	53.7	49.3	49.3
52.5°	5585.3	1512.2	189.1	123.2	92.4	71.3	57.2	45.7	42.2	37.8	37.8
55°	5667.9	1420.7	164.5	104.7	76.5	58.9	44.9	35.2	32.5	29.9	29.0
57.5°	5900.2	1394.3	143.4	88.9	63.3	46.6	34.3	26.4	24.6	21.1	21.1
60°	6274.1	1407.5	124.0	75.7	51.0	36.1	25.5	20.2	18.5	15.0	15.0
62.5°	6677.8	1390.8	104.7	65.1	39.6	26.4	17.6	15.0	15.0	8.8	7.9
65°	6755.3	1238.6	89.7	53.7	30.8	19.4	11.4	9.7	13.2	1.8	0.0
67.5°	6269.7	960.6	77.4	41.3	22.9	15.0	8.8	4.4	11.4	0.0	0.0
70°	5013.4	610.5	62.5	29.9	17.6	12.3	7.0	1.8	8.8	0.0	0.0
72.5°	3545.2	354.5	49.3	21.1	15.0	9.7	5.3	0.0	5.3	0.0	0.0
75°	1792.8	189.1	30.8	15.8	11.4	7.0	3.5	0.0	0.9	0.0	0.0
77.5°	388.0	88.0	19.4	11.4	7.9	4.4	1.8	0.0	0.0	0.0	0.0
80°	84.5	38.7	12.3	7.0	4.4	2.6	0.0	0.0	0.0	0.0	0.0
82.5°	30.8	20.2	6.2	3.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.7	10.6	3.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.8	3.5	0.9	0.9	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)