

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: P322098

Luminaire Tested: **GAN-SA4D-830-U-T2-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P322098
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-13)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA4D-830-U-T2-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17694 lumens
Efficiency: N/A
Efficacy: 68.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

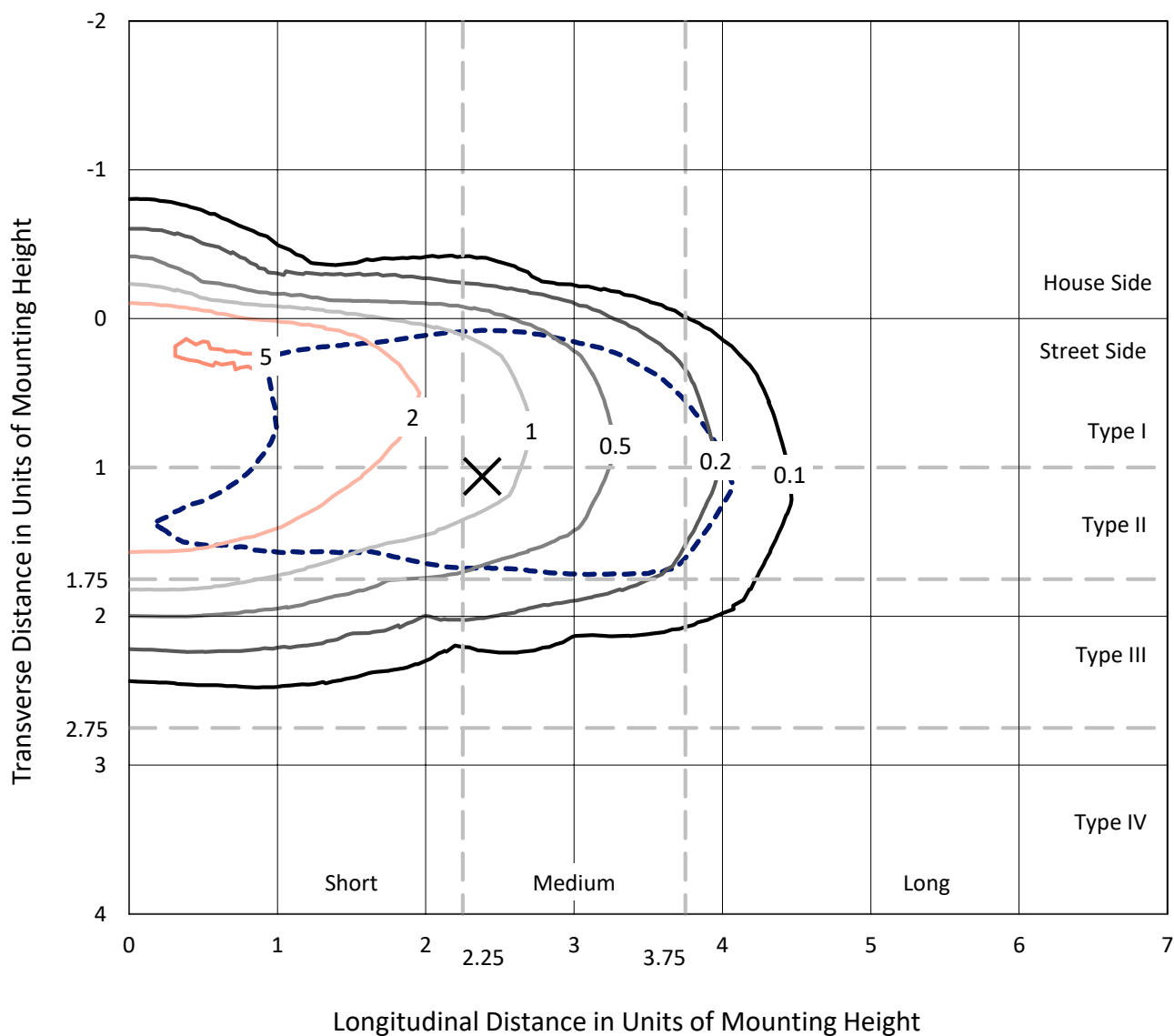
Input Watts (W): 258
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

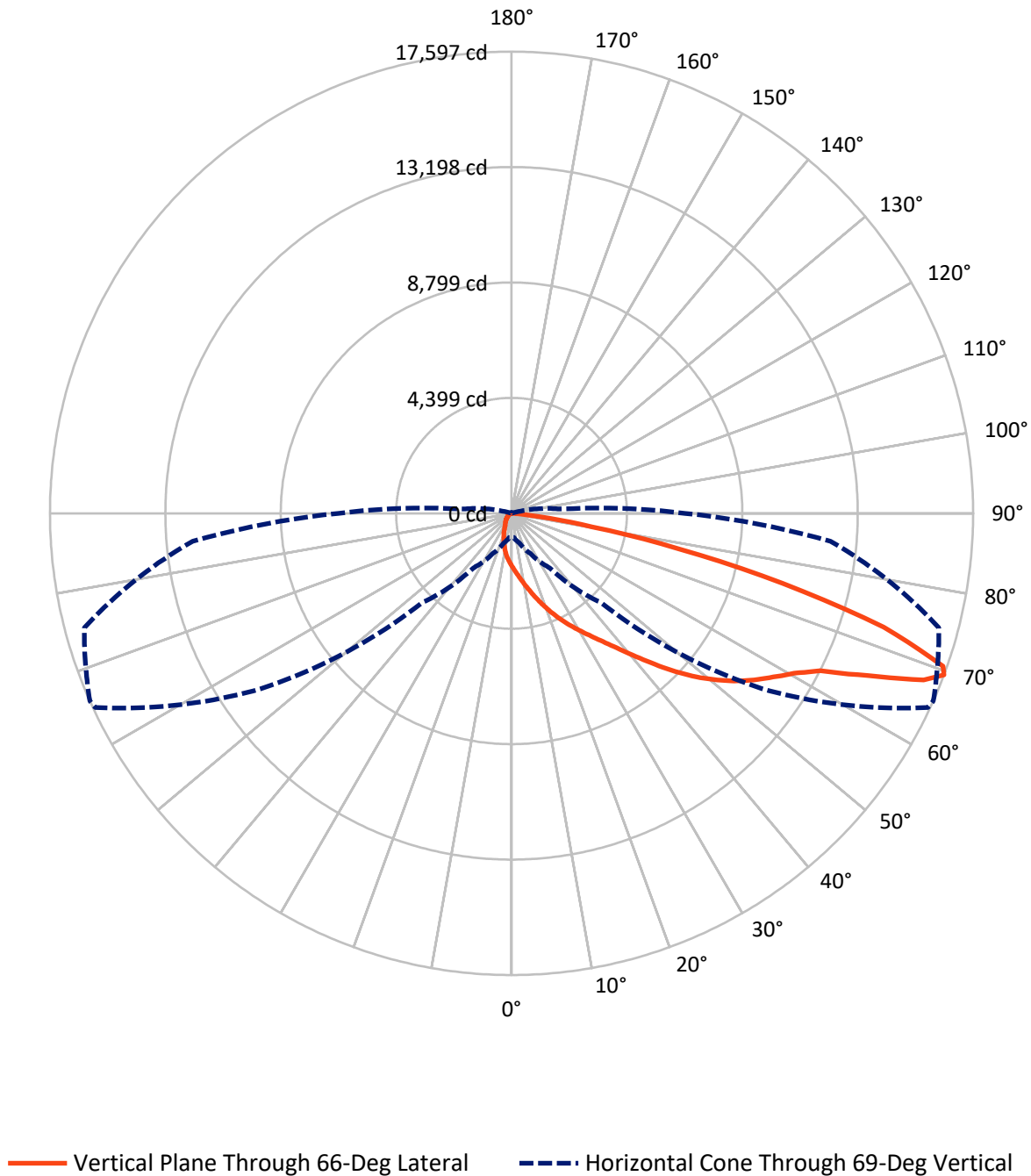
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 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	1061.4	0.0	1061.4
	% Fixture	6.0	0.0	6.0
Street Side	Lumens	16632.6	0.0	16632.6
	% Fixture	94.0	0.0	94.0
Total	Lumens	17694.0	0.0	17694.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.6	1.1
10°-20°	579.3	3.3
20°-30°	1008.8	5.7
30°-40°	1769.9	10.0
40°-50°	2962.5	16.7
50°-60°	4354.6	24.6
60°-70°	4471.1	25.3
70°-80°	2207.3	12.5
80°-90°	145.9	0.8
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°	17694.0	100.0
0°-180°	17694.0	100.0

Coefficient of Utilization



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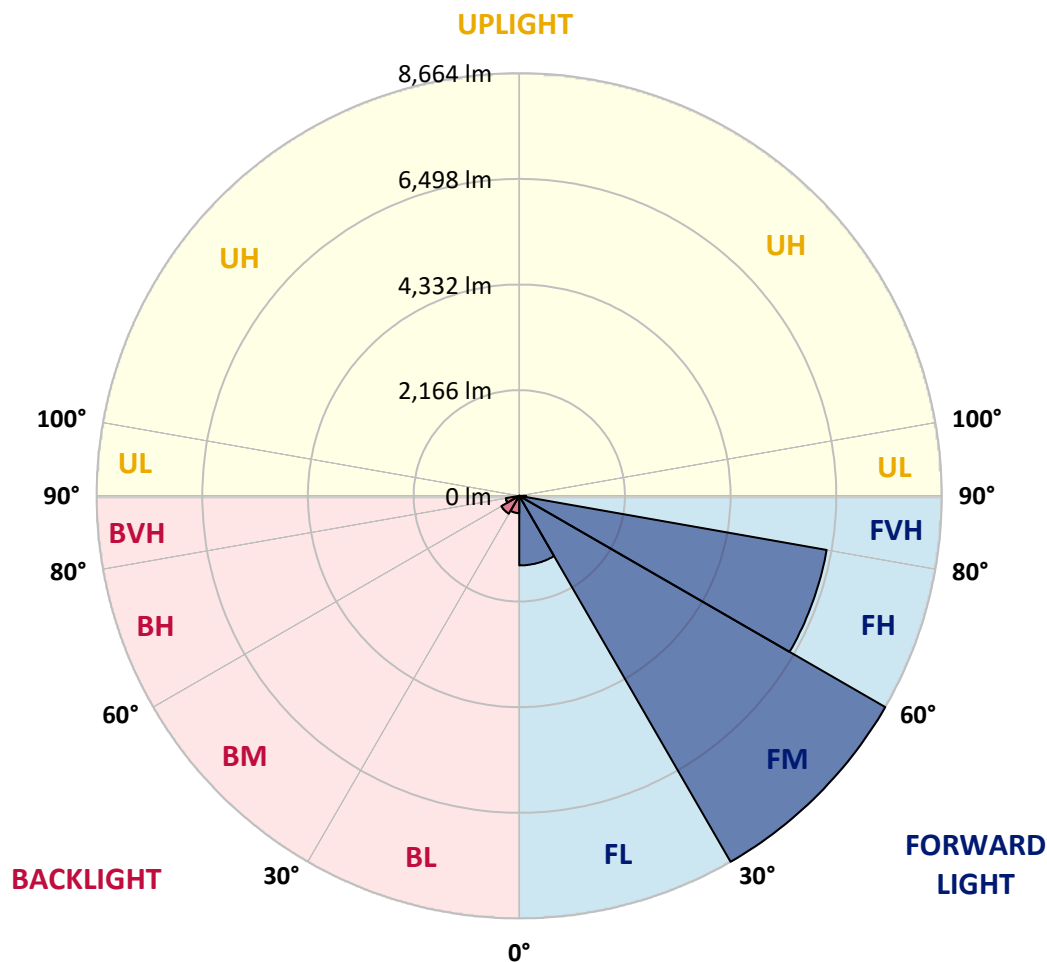
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1427.7	8.1			
FM	(30°-60°)	8663.8	49.0			
FH	(60°-80°)	6398.6	36.2			G3/7500
FVH	(80°-90°)	142.4	0.8			G2/225
BL	(0°-30°)	355.0	2.0	B1/500		
BM	(30°-60°)	423.2	2.4	B1/1000		
BH	(60°-80°)	279.7	1.6	B1/500		G1/500
BVH	(80°-90°)	3.5	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°	66°	75°	85°
0°	2013.6	2013.6	2013.6	2013.6	2013.6	2013.6	2013.6	2013.6	2013.6	2013.6	2013.6
2.5°	2370.0	2359.9	2355.7	2337.2	2305.3	2280.9	2233.8	2179.2	2169.1	2116.2	2051.5
5°	2677.6	2669.2	2663.3	2637.2	2604.4	2543.1	2457.4	2355.7	2336.4	2235.5	2106.1
7.5°	2891.9	2907.0	2907.0	2890.2	2849.0	2802.8	2697.7	2559.1	2534.7	2380.1	2179.2
10°	3017.1	3035.6	3049.9	3064.2	3058.3	3039.8	2940.6	2784.3	2754.9	2549.8	2264.1
12.5°	3028.9	3047.3	3087.7	3147.4	3205.3	3247.4	3185.2	3033.9	3000.3	2746.5	2364.9
15°	2963.3	2982.6	3044.8	3160.8	3301.1	3423.9	3444.0	3310.4	3275.9	2981.0	2491.0
17.5°	2849.0	2861.6	2950.7	3111.2	3331.4	3556.6	3678.5	3607.1	3575.1	3249.0	2631.3
20°	2764.1	2773.4	2851.5	3023.8	3312.9	3639.8	3900.4	3922.2	3888.6	3536.5	2783.5
22.5°	2909.5	2926.3	2928.8	3010.4	3262.5	3681.0	4095.3	4232.3	4207.1	3841.5	2933.0
25°	3307.0	3326.4	3262.5	3212.1	3305.4	3699.5	4262.6	4550.0	4529.8	4170.1	3083.5
27.5°	3832.3	3852.5	3770.1	3619.7	3529.7	3769.3	4411.3	4872.7	4871.9	4518.1	3245.7
30°	4348.3	4368.5	4284.4	4134.0	3927.3	3966.8	4539.9	5210.6	5215.6	4876.9	3418.0
32.5°	4889.5	4914.7	4828.2	4634.9	4418.9	4308.0	4720.6	5550.1	5578.7	5292.9	3612.1
35°	5504.7	5508.1	5386.2	5183.7	4934.9	4764.3	5010.6	5930.8	5998.9	5808.1	3858.3
37.5°	6108.1	6132.5	6032.5	5713.1	5484.5	5291.3	5441.7	6406.5	6503.1	6437.6	4180.2
40°	6555.2	6606.5	6592.2	6247.6	6030.8	5893.0	5977.0	6972.1	7094.8	7170.4	4586.1
42.5°	6835.9	6874.6	6940.1	6732.6	6535.9	6558.6	6609.0	7631.0	7782.2	8005.8	5052.6
45°	7157.8	7176.3	7230.9	7139.3	7006.5	7235.1	7279.7	8373.1	8531.9	8904.2	5570.3
47.5°	7551.1	7594.8	7610.0	7525.9	7465.4	7833.5	7926.0	9047.9	9270.6	9866.5	6118.2
50°	8052.0	8063.8	8089.8	8035.2	7974.7	8347.8	8505.8	9756.4	9958.9	10832.1	6658.6
52.5°	8542.0	8584.0	8674.8	8640.3	8615.9	8785.7	9022.7	10395.1	10621.2	11637.2	7198.2
55°	8683.2	8719.3	9032.8	9247.1	9445.4	9325.2	9516.9	10967.4	11212.0	12356.6	7717.5
57.5°	8119.2	8192.4	8735.3	9293.3	10116.1	10164.0	10195.9	11554.9	11774.2	12907.9	8257.9
60°	6693.9	6708.2	7599.0	8556.3	10005.1	10896.0	11187.6	12186.0	12370.1	13421.4	8905.0
62.5°	4257.5	4402.9	5380.3	6731.7	8831.9	10790.1	12386.9	13140.7	13208.0	14037.4	9832.9
65°	2027.9	2122.0	2826.3	4159.2	6397.2	9434.5	13214.7	14867.8	14898.0	15258.6	11072.5
67.5°	1122.8	1168.2	1503.5	2238.9	3739.8	6672.1	12880.2	16913.3	16941.9	16505.7	12160.0
69°	878.2	916.9	1180.8	1687.6	2535.5	4795.4	11655.7	17512.6	17597.4	16862.9	12198.6
70°	745.4	783.3	1016.9	1425.3	2038.8	3705.4	10374.9	17363.8	17453.7	16829.3	11910.4
72.5°	456.3	478.2	677.4	1003.5	1366.5	1864.0	6398.1	14684.6	14836.7	15437.6	10236.3
75°	307.6	319.4	423.6	692.5	977.4	959.8	3323.8	10350.5	10680.0	12008.7	7560.4
77.5°	220.2	231.1	284.1	447.9	684.9	633.7	1505.2	6432.5	6503.1	7202.4	4123.1
80°	125.2	135.3	200.9	266.4	464.7	422.7	598.4	3072.6	3107.9	3088.5	1376.6
82.5°	65.6	74.0	110.1	175.6	298.3	276.5	248.8	1028.7	1033.7	859.7	301.7
85°	12.6	15.1	54.6	120.2	153.8	120.2	101.7	241.2	246.2	217.7	74.8
87.5°	0.0	0.8	21.9	26.9	30.3	31.1	32.8	47.1	50.4	68.1	20.2
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°	2013.6	2013.6	2013.6	2013.6	2013.6	2013.6	2013.6	2013.6	2013.6	2013.6	2013.6
2.5°	2022.9	1992.6	1934.6	1867.4	1815.3	1764.0	1723.7	1681.7	1666.5	1659.0	1658.1
5°	2043.0	1979.2	1856.5	1730.4	1627.0	1529.6	1459.8	1393.4	1362.3	1348.0	1342.1
7.5°	2076.7	1974.1	1776.6	1584.2	1435.4	1313.6	1216.9	1144.6	1108.5	1093.4	1087.5
10°	2116.2	1967.4	1683.4	1429.5	1239.6	1113.5	1017.7	946.3	906.8	890.0	881.6
12.5°	2162.4	1955.6	1575.8	1273.2	1072.4	946.3	830.3	742.1	696.7	677.4	668.1
15°	2219.5	1943.9	1463.2	1126.2	925.3	771.5	644.6	584.9	575.7	572.3	573.2
17.5°	2275.8	1925.4	1340.5	980.8	770.7	602.6	537.9	534.5	536.2	536.2	536.2
20°	2326.3	1883.4	1206.8	856.4	623.6	508.5	495.0	489.1	484.9	481.6	477.4
22.5°	2365.8	1827.1	1078.3	732.8	509.3	465.6	444.6	426.1	411.0	400.9	395.8
25°	2392.7	1752.3	960.6	614.3	458.0	423.6	385.8	354.7	331.1	316.8	311.0
27.5°	2412.8	1671.6	855.5	514.3	422.7	374.8	325.2	288.3	263.9	251.3	246.2
30°	2427.1	1580.0	763.1	452.1	383.2	323.6	270.6	234.5	216.8	210.1	206.7
32.5°	2440.6	1478.3	675.7	422.7	346.3	276.5	226.9	199.2	188.3	179.8	177.3
35°	2474.2	1384.2	592.5	391.6	308.4	236.2	195.0	174.8	163.9	158.8	157.2
37.5°	2554.0	1314.4	512.7	359.7	270.6	204.2	170.6	156.3	146.2	141.2	139.5
40°	2682.6	1279.1	445.4	325.2	233.6	179.8	154.6	141.2	130.3	122.7	121.0
42.5°	2871.7	1284.2	398.4	290.8	204.2	160.5	139.5	123.5	111.8	105.1	103.4
45°	3101.1	1321.1	365.6	257.2	179.8	145.4	122.7	105.9	95.0	89.1	87.4
47.5°	3349.9	1380.8	338.7	226.9	160.5	131.1	105.9	88.2	79.0	74.0	73.1
50°	3612.1	1438.8	311.0	197.5	143.7	116.8	89.1	73.1	65.6	61.4	59.7
52.5°	3877.7	1506.0	285.7	170.6	129.4	100.0	74.0	59.7	53.8	50.4	48.7
55°	4163.4	1556.4	261.4	149.6	115.1	84.9	61.4	49.6	44.5	40.3	39.5
57.5°	4499.6	1634.6	236.2	129.4	98.3	70.6	50.4	39.5	35.3	31.1	30.3
60°	4953.4	1726.2	209.3	114.3	80.7	58.0	41.2	31.9	26.9	23.5	22.7
62.5°	5551.8	1827.9	175.6	100.0	65.6	47.1	32.8	25.2	19.3	15.1	15.1
65°	6310.7	1993.5	143.7	84.0	53.8	38.7	25.2	18.5	10.9	6.7	6.7
67.5°	6753.6	2022.0	116.0	68.9	43.7	32.8	21.0	12.6	3.4	0.8	0.0
69°	6611.5	1856.5	98.3	58.8	37.8	31.1	19.3	9.2	1.7	0.0	0.0
70°	6344.3	1697.6	86.6	52.1	34.5	29.4	18.5	6.7	1.7	0.0	0.0
72.5°	5242.5	1208.5	65.6	38.7	25.2	26.1	16.8	4.2	1.7	0.0	0.0
75°	3818.8	734.5	47.1	26.9	16.0	19.3	11.8	1.7	0.8	0.0	0.0
77.5°	2124.6	346.3	29.4	15.1	10.1	11.8	5.9	0.0	0.0	0.0	0.0
80°	690.0	94.1	13.4	8.4	5.9	6.7	2.5	0.0	0.0	0.0	0.0
82.5°	127.7	26.9	7.6	4.2	1.7	1.7	0.0	0.0	0.0	0.0	0.0
85°	27.7	10.9	4.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.2	3.4	0.8	0.0	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)