

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: P322063

Luminaire Tested: **GAN-SA9D-827-U-T2-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P322063
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-SA9D-827-U-T2-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 2700K, 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: 36276 lumens
Efficiency: N/A
Efficacy: 63.1 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G5

Input Watts (W): 575
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

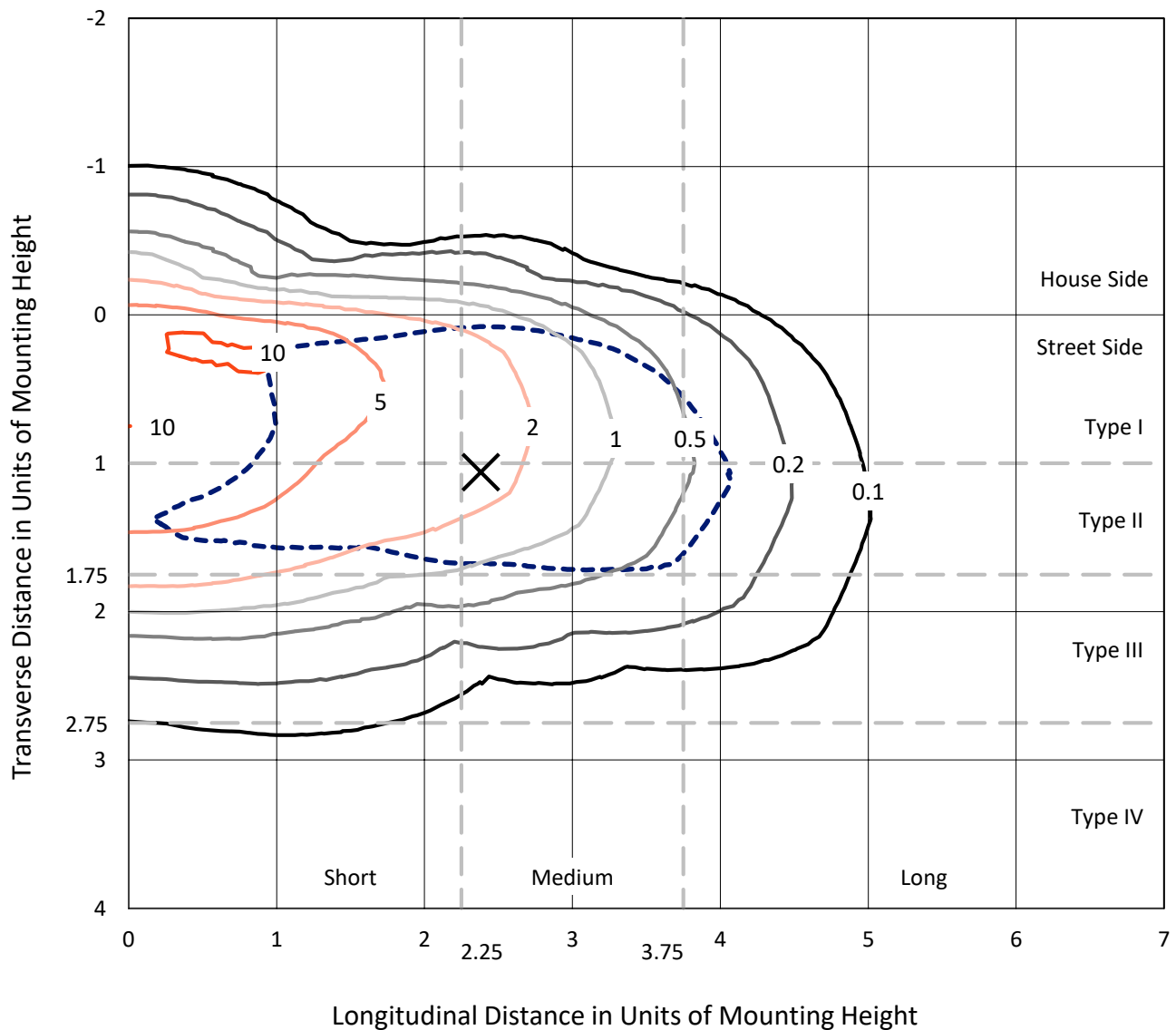


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Iso-Footcandle Lines of Horizontal Illumination

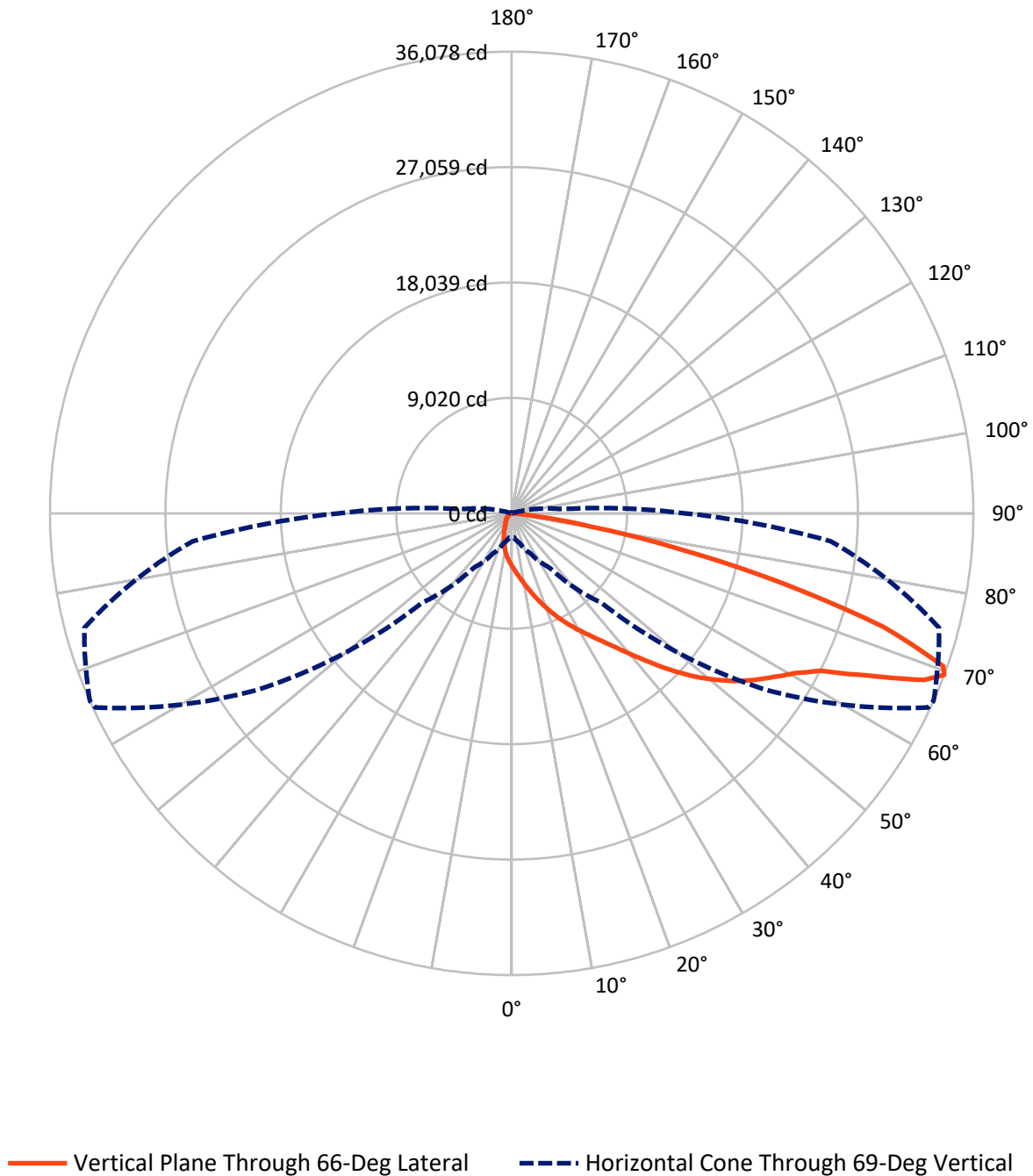
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.9 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	2176.1	0.0	2176.1
	% Fixture	6.0	0.0	6.0
Street Side	Lumens	34100.0	0.0	34100.0
	% Fixture	94.0	0.0	94.0
Total	Lumens	36276.0	0.0	36276.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	399.1	1.1
10°-20°	1187.7	3.3
20°-30°	2068.2	5.7
30°-40°	3628.6	10.0
40°-50°	6073.7	16.7
50°-60°	8927.8	24.6
60°-70°	9166.6	25.3
70°-80°	4525.3	12.5
80°-90°	299.2	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°	36276.0	100.0
0°-180°	36276.0	100.0

Coefficient of Utilization



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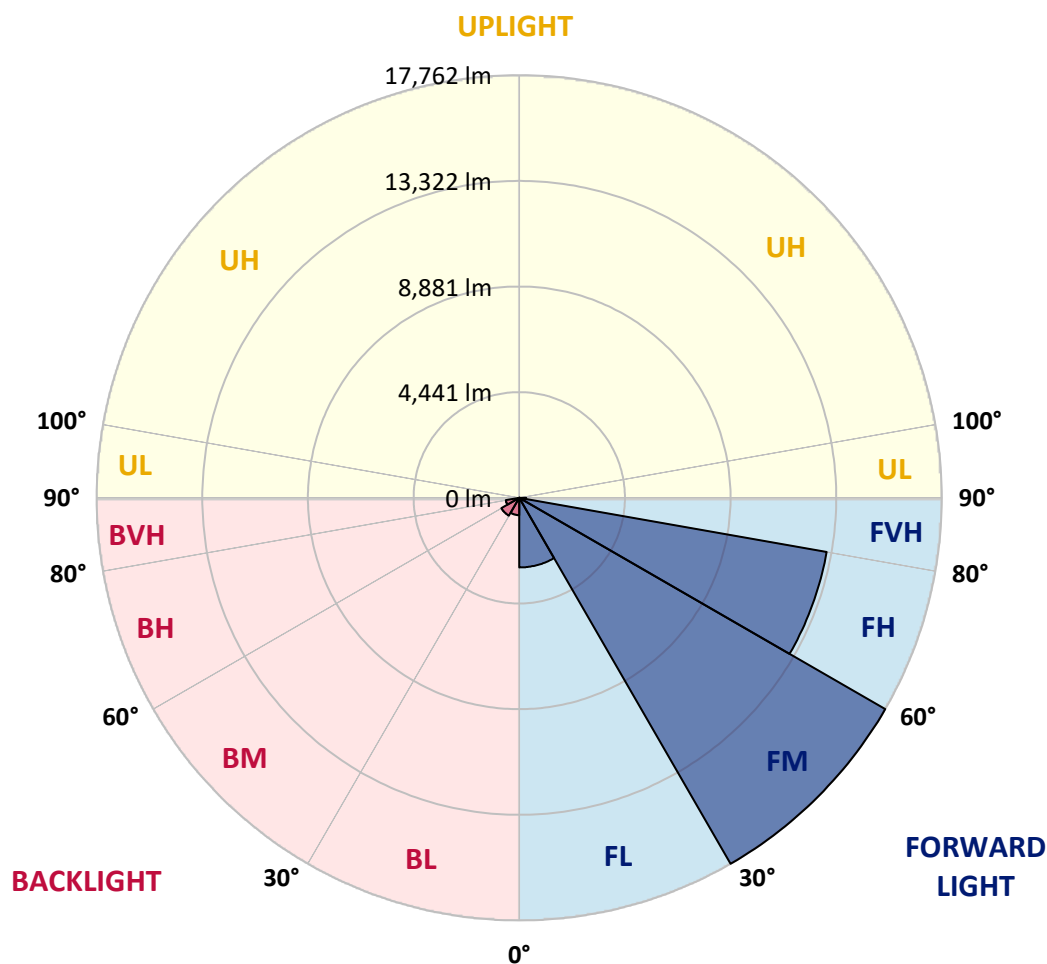
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2927.1	8.1			
FM	(30°-60°)	17762.5	49.0			
FH	(60°-80°)	13118.4	36.2			G5
FVH	(80°-90°)	292.0	0.8			G3/500
BL	(0°-30°)	727.8	2.0	B2/1000		
BM	(30°-60°)	867.6	2.4	B1/1000		
BH	(60°-80°)	573.5	1.6	B2/1000		G2/1000
BVH	(80°-90°)	7.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G5

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4128.3	4128.3	4128.3	4128.3	4128.3	4128.3	4128.3	4128.3	4128.3	4128.3	4128.3
2.5°	4858.9	4838.2	4829.6	4791.7	4726.2	4676.2	4579.8	4467.8	4447.1	4338.5	4205.9
5°	5489.5	5472.3	5460.2	5406.8	5339.6	5213.8	5038.1	4829.6	4790.0	4583.2	4317.9
7.5°	5928.9	5959.9	5959.9	5925.4	5841.0	5746.2	5530.9	5246.6	5196.6	4879.6	4467.8
10°	6185.6	6223.5	6252.8	6282.1	6270.0	6232.1	6028.8	5708.3	5648.0	5227.6	4641.8
12.5°	6209.7	6247.6	6330.3	6452.7	6571.5	6657.7	6530.2	6220.1	6151.1	5630.8	4848.5
15°	6075.3	6115.0	6242.5	6480.2	6768.0	7019.5	7060.9	6786.9	6716.3	6111.5	5107.0
17.5°	5841.0	5866.8	6049.5	6378.6	6830.0	7291.8	7541.6	7395.1	7329.7	6661.1	5394.7
20°	5667.0	5685.9	5846.2	6199.4	6792.1	7462.3	7996.5	8041.3	7972.4	7250.4	5706.6
22.5°	5965.1	5999.5	6004.7	6171.8	6688.7	7546.8	8396.2	8677.1	8625.4	7875.9	6013.3
25°	6780.0	6819.7	6688.7	6585.3	6776.6	7584.7	8739.1	9328.4	9287.0	8549.6	6321.7
27.5°	7856.9	7898.3	7729.4	7421.0	7236.6	7727.7	9044.1	9990.0	9988.3	9262.9	6654.3
30°	8914.8	8956.2	8783.9	8475.5	8051.6	8132.6	9307.7	10682.6	10693.0	9998.6	7007.5
32.5°	10024.5	10076.1	9898.7	9502.4	9059.6	8832.1	9678.1	11378.7	11437.3	10851.5	7405.5
35°	11285.7	11292.6	11042.8	10627.5	10117.5	9767.7	10272.6	12159.3	12298.8	11907.7	7910.3
37.5°	12522.8	12572.8	12367.7	11713.0	11244.3	10848.1	11156.5	13134.5	13332.6	13198.2	8570.2
40°	13439.5	13544.6	13515.3	12808.8	12364.3	12081.7	12254.0	14294.1	14545.6	14700.7	9402.5
42.5°	14014.9	14094.2	14228.6	13803.0	13399.8	13446.3	13549.7	15644.9	15955.0	16413.4	10358.7
45°	14674.9	14712.8	14824.8	14636.9	14364.7	14833.4	14924.7	17166.3	17492.0	18255.3	11420.1
47.5°	15481.2	15570.8	15601.8	15429.5	15305.5	16060.2	16249.7	18549.9	19006.5	20228.1	12543.5
50°	16508.1	16532.3	16585.7	16473.7	16349.6	17114.6	17438.6	20002.4	20417.6	22207.8	13651.4
52.5°	17512.6	17598.8	17784.9	17714.2	17664.3	18012.3	18498.2	21311.9	21775.4	23858.5	14757.6
55°	17802.1	17876.2	18518.9	18958.2	19364.9	19118.5	19511.3	22485.2	22986.6	25333.4	15822.4
57.5°	16646.0	16795.9	17908.9	19053.0	20739.8	20838.0	20903.5	23689.6	24139.3	26463.7	16930.3
60°	13723.8	13753.0	15579.4	17541.9	20512.4	22338.8	22936.7	24983.6	25360.9	27516.4	18257.0
62.5°	8728.8	9026.8	11030.7	13801.3	18107.1	22121.7	25395.4	26940.9	27078.8	28779.4	20159.2
65°	4157.6	4350.6	5794.5	8527.2	13115.5	19342.5	27092.6	30481.7	30543.7	31282.9	22700.6
67.5°	2301.9	2395.0	3082.5	4590.1	7667.4	13679.0	26406.8	34675.5	34734.1	33839.9	24930.2
69°	1800.5	1879.8	2420.8	3459.8	5198.3	9831.5	23896.4	35904.0	36078.0	34572.1	25009.4
70°	1528.3	1605.8	2084.8	2922.2	4180.0	7596.7	21270.5	35599.1	35783.4	34503.2	24418.5
72.5°	935.6	980.4	1388.7	2057.3	2801.6	3821.6	13117.3	30106.1	30418.0	31649.9	20986.2
75°	630.6	654.7	868.4	1419.8	2003.9	1967.7	6814.5	21220.6	21896.0	24620.0	15500.2
77.5°	451.4	473.8	582.4	918.4	1404.3	1299.1	3085.9	13187.9	13332.6	14766.2	8453.1
80°	256.7	277.4	411.8	546.2	952.8	866.7	1226.8	6299.3	6371.7	6332.1	2822.3
82.5°	134.4	151.6	225.7	360.1	611.7	566.9	510.0	2109.0	2119.3	1762.6	618.6
85°	25.8	31.0	112.0	246.4	315.3	246.4	208.5	494.5	504.8	446.3	153.3
87.5°	0.0	1.7	44.8	55.1	62.0	63.8	67.2	96.5	103.4	139.6	41.4
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°	4128.3	4128.3	4128.3	4128.3	4128.3	4128.3	4128.3	4128.3	4128.3	4128.3	4128.3
2.5°	4147.3	4085.3	3966.4	3828.5	3721.7	3616.6	3533.9	3447.7	3416.7	3401.2	3399.5
5°	4188.6	4057.7	3806.1	3547.7	3335.7	3135.9	2992.9	2856.7	2793.0	2763.7	2751.6
7.5°	4257.6	4047.3	3642.4	3247.9	2942.9	2693.1	2494.9	2346.7	2272.6	2241.6	2229.6
10°	4338.5	4033.6	3451.2	2930.8	2541.4	2283.0	2086.6	1940.1	1859.1	1824.7	1807.4
12.5°	4433.3	4009.4	3230.6	2610.4	2198.6	1940.1	1702.3	1521.4	1428.4	1388.7	1369.8
15°	4550.5	3985.3	2999.8	2308.8	1897.0	1581.7	1321.5	1199.2	1180.3	1173.4	1175.1
17.5°	4665.9	3947.4	2748.2	2010.7	1580.0	1235.4	1102.7	1095.8	1099.3	1099.3	1099.3
20°	4769.3	3861.3	2474.2	1755.7	1278.5	1042.4	1014.9	1002.8	994.2	987.3	978.7
22.5°	4850.3	3745.8	2210.6	1502.5	1044.1	954.5	911.5	873.6	842.6	821.9	811.5
25°	4905.4	3592.5	1969.4	1259.5	939.0	868.4	790.9	727.1	678.9	649.6	637.5
27.5°	4946.8	3427.1	1754.0	1054.5	866.7	768.5	666.8	591.0	541.0	515.2	504.8
30°	4976.0	3239.3	1564.5	927.0	785.7	663.4	554.8	480.7	444.5	430.8	423.9
32.5°	5003.6	3030.8	1385.3	866.7	709.9	566.9	465.2	408.4	386.0	368.7	363.6
35°	5072.5	2837.8	1214.7	802.9	632.3	484.2	399.7	358.4	336.0	325.6	322.2
37.5°	5236.2	2694.8	1051.0	737.4	554.8	418.7	349.8	320.5	299.8	289.5	286.0
40°	5499.8	2622.4	913.2	666.8	479.0	368.7	317.0	289.5	267.1	251.6	248.1
42.5°	5887.5	2632.8	816.7	596.2	418.7	329.1	286.0	253.3	229.2	215.4	211.9
45°	6357.9	2708.6	749.5	527.2	368.7	298.1	251.6	217.1	194.7	182.6	179.2
47.5°	6867.9	2830.9	694.4	465.2	329.1	268.8	217.1	180.9	162.0	151.6	149.9
50°	7405.5	2949.8	637.5	404.9	294.6	239.5	182.6	149.9	134.4	125.8	122.3
52.5°	7950.0	3087.6	585.8	349.8	265.3	205.0	151.6	122.3	110.3	103.4	99.9
55°	8535.8	3191.0	535.9	306.7	236.1	174.0	125.8	101.7	91.3	82.7	81.0
57.5°	9225.0	3351.2	484.2	265.3	201.6	144.7	103.4	81.0	72.4	63.8	62.0
60°	10155.4	3539.1	429.0	234.3	165.4	118.9	84.4	65.5	55.1	48.2	46.5
62.5°	11382.2	3747.5	360.1	205.0	134.4	96.5	67.2	51.7	39.6	31.0	31.0
65°	12938.1	4087.0	294.6	172.3	110.3	79.3	51.7	37.9	22.4	13.8	13.8
67.5°	13846.1	4145.6	237.8	141.3	89.6	67.2	43.1	25.8	6.9	1.7	0.0
69°	13554.9	3806.1	201.6	120.6	77.5	63.8	39.6	19.0	3.4	0.0	0.0
70°	13007.0	3480.5	177.5	106.8	70.6	60.3	37.9	13.8	3.4	0.0	0.0
72.5°	10748.1	2477.7	134.4	79.3	51.7	53.4	34.5	8.6	3.4	0.0	0.0
75°	7829.3	1505.9	96.5	55.1	32.7	39.6	24.1	3.4	1.7	0.0	0.0
77.5°	4355.8	709.9	60.3	31.0	20.7	24.1	12.1	0.0	0.0	0.0	0.0
80°	1414.6	193.0	27.6	17.2	12.1	13.8	5.2	0.0	0.0	0.0	0.0
82.5°	261.9	55.1	15.5	8.6	3.4	3.4	0.0	0.0	0.0	0.0	0.0
85°	56.9	22.4	8.6	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	19.0	6.9	1.7	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)