

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: P322099

Luminaire Tested: **GAN-SA5D-830-U-T2-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P322099
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-SA5D-830-U-T2-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 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: 21922 lumens
Efficiency: N/A
Efficacy: 68.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G4

Input Watts (W): 320
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

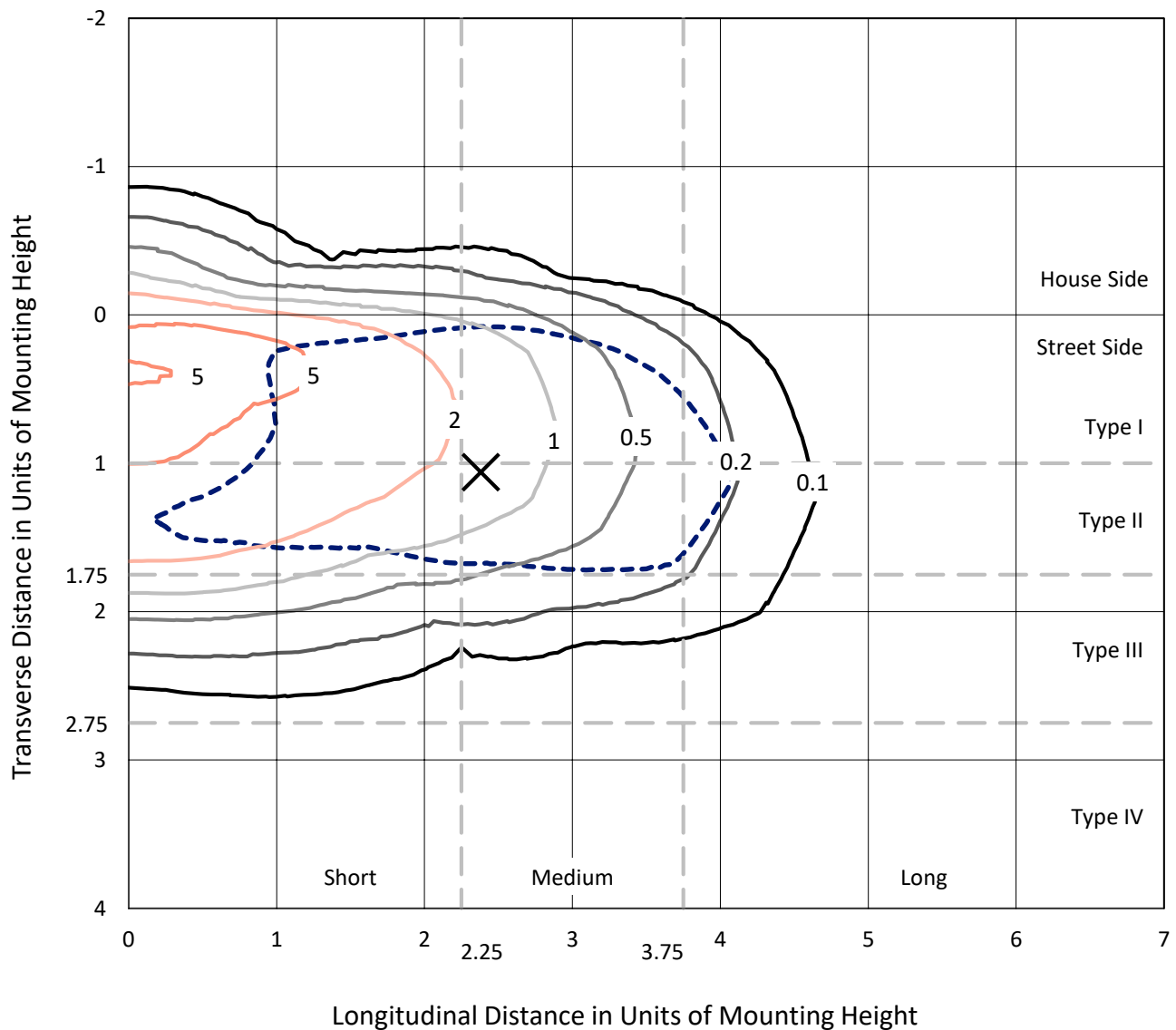


REPORT NUMBER: P322099

CATALOG NUMBER: GAN-SA5D-830-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

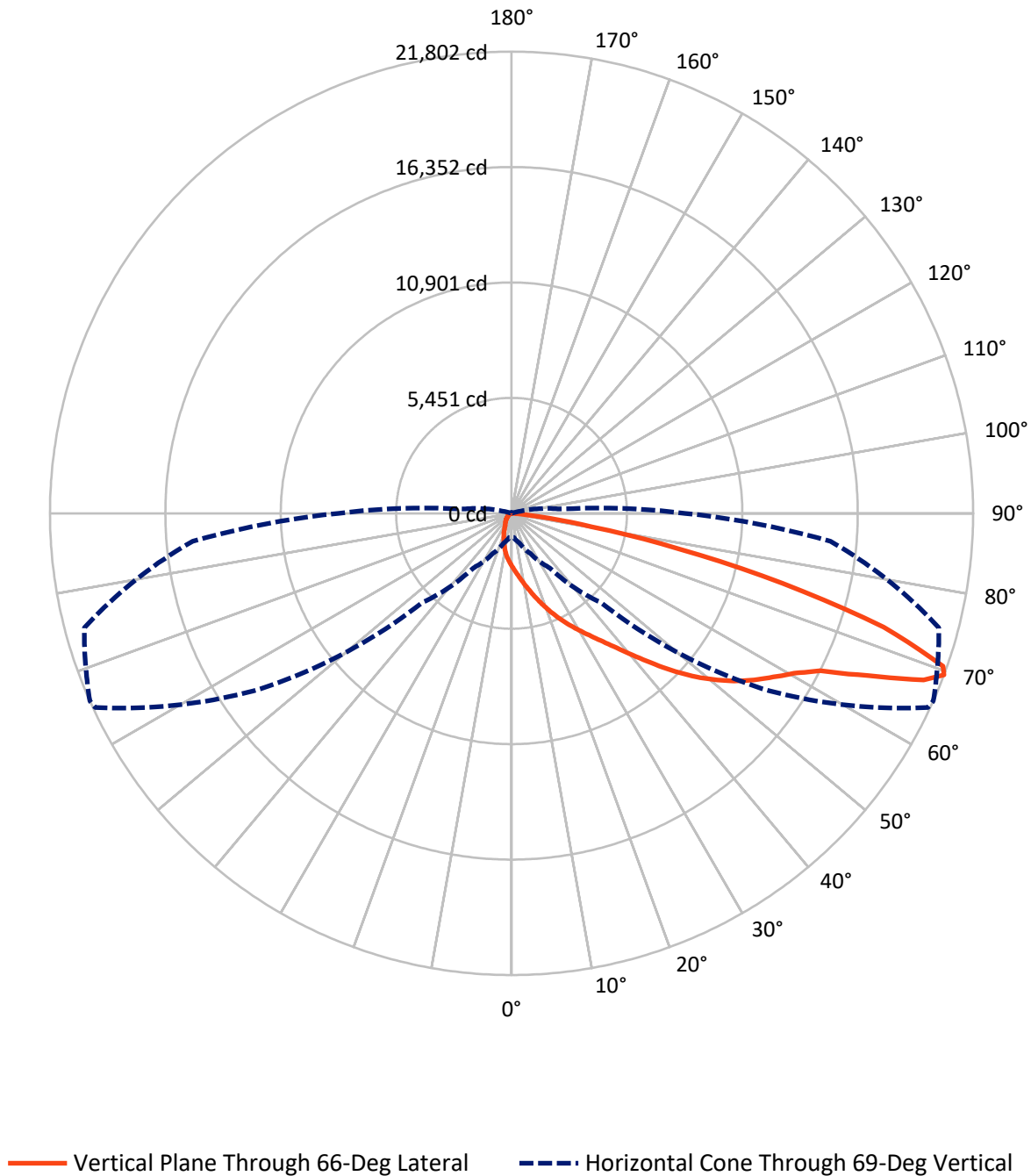
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type II - Medium - N/A

REPORT NUMBER: P322099
CATALOG NUMBER: GAN-SA5D-830-U-T2-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P322099

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1315.0	0.0	1315.0
	% Fixture	6.0	0.0	6.0
Street Side	Lumens	20607.0	0.0	20607.0
	% Fixture	94.0	0.0	94.0
Total	Lumens	21922.0	0.0	21922.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.2	1.1
10°-20°	717.7	3.3
20°-30°	1249.8	5.7
30°-40°	2192.8	10.0
40°-50°	3670.4	16.7
50°-60°	5395.2	24.6
60°-70°	5539.5	25.3
70°-80°	2734.7	12.5
80°-90°	180.8	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°	21922.0	100.0
0°-180°	21922.0	100.0

Coefficient of Utilization



REPORT NUMBER: P322099

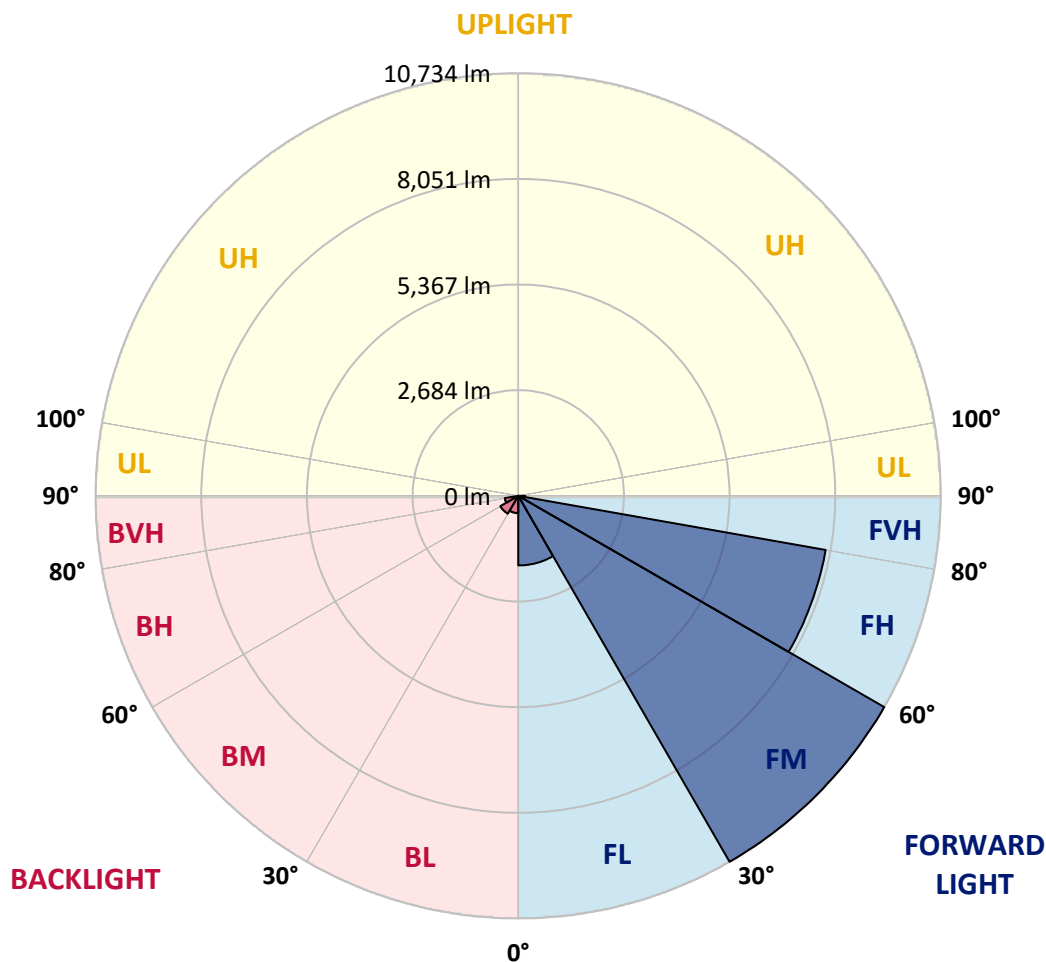
CATALOG NUMBER: GAN-SA5D-830-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1768.9	8.1			
FM	(30°-60°)	10734.1	49.0			
FH	(60°-80°)	7927.6	36.2			G4/12000
FVH	(80°-90°)	176.4	0.8			G2/225
BL	(0°-30°)	439.8	2.0	B1/500		
BM	(30°-60°)	524.3	2.4	B1/1000		
BH	(60°-80°)	346.5	1.6	B1/500		G1/500
BVH	(80°-90°)	4.4	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-G4

Type II Medium





REPORT NUMBER: P322099

CATALOG NUMBER: GAN-SA5D-830-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2494.8	2494.8	2494.8	2494.8	2494.8	2494.8	2494.8	2494.8	2494.8	2494.8	2494.8
2.5°	2936.3	2923.8	2918.6	2895.7	2856.1	2825.9	2767.6	2699.9	2687.4	2621.8	2541.6
5°	3317.4	3307.0	3299.7	3267.4	3226.8	3150.8	3044.6	2918.6	2894.6	2769.7	2609.3
7.5°	3582.9	3601.6	3601.6	3580.8	3529.8	3472.5	3342.4	3170.6	3140.4	2948.8	2699.9
10°	3738.0	3760.9	3778.6	3796.3	3789.0	3766.1	3643.3	3449.6	3413.2	3159.1	2805.1
12.5°	3752.6	3775.5	3825.5	3899.4	3971.3	4023.3	3946.3	3758.9	3717.2	3402.7	2930.0
15°	3671.4	3695.3	3772.4	3916.1	4090.0	4242.0	4267.0	4101.4	4058.7	3693.3	3086.2
17.5°	3529.8	3545.4	3655.8	3854.6	4127.4	4406.5	4557.5	4469.0	4429.4	4025.4	3260.1
20°	3424.6	3436.1	3532.9	3746.4	4104.5	4509.6	4832.4	4859.4	4817.8	4381.5	3448.6
22.5°	3604.7	3625.6	3628.7	3729.7	4042.1	4560.6	5073.9	5243.6	5212.4	4759.5	3633.9
25°	4097.3	4121.2	4042.1	3979.6	4095.2	4583.5	5281.1	5637.2	5612.2	5166.6	3820.3
27.5°	4748.0	4773.0	4671.0	4484.6	4373.2	4669.9	5465.4	6037.1	6036.0	5597.7	4021.2
30°	5387.3	5412.3	5308.2	5121.8	4865.7	4914.6	5624.7	6455.6	6461.9	6042.3	4234.7
32.5°	6057.9	6089.1	5981.9	5742.4	5474.8	5337.4	5848.6	6876.3	6911.7	6557.7	4475.2
35°	6820.1	6824.2	6673.3	6422.3	6114.1	5902.7	6207.8	7348.0	7432.3	7196.0	4780.3
37.5°	7567.7	7597.9	7474.0	7078.3	6795.1	6555.6	6742.0	7937.3	8057.1	7975.8	5179.1
40°	8121.6	8185.1	8167.4	7740.5	7471.9	7301.1	7405.2	8638.1	8790.1	8883.8	5682.0
42.5°	8469.4	8517.3	8598.5	8341.3	8097.7	8125.8	8188.3	9454.4	9641.8	9918.8	6259.9
45°	8868.2	8891.1	8958.8	8845.3	8680.8	8964.0	9019.2	10373.8	10570.6	11031.9	6901.3
47.5°	9355.5	9409.6	9428.4	9324.2	9249.3	9705.3	9819.9	11209.9	11485.8	12224.1	7580.2
50°	9976.1	9990.6	10022.9	9955.2	9880.3	10342.6	10538.3	12087.7	12338.6	13420.5	8249.7
52.5°	10583.1	10635.2	10747.6	10704.9	10674.7	10885.0	11178.7	12879.0	13159.1	14418.0	8918.2
55°	10758.0	10802.8	11191.2	11456.7	11702.4	11553.5	11790.9	13588.1	13891.1	15309.2	9561.6
57.5°	10059.4	10149.9	10822.6	11514.0	12533.3	12592.7	12632.2	14315.9	14587.7	15992.3	10231.2
60°	8293.4	8311.1	9414.8	10600.8	12395.9	13499.6	13860.9	15097.9	15325.9	16628.5	11032.9
62.5°	5274.9	5455.0	6666.0	8340.3	10942.3	13368.4	15346.7	16280.7	16364.0	17391.7	12182.4
65°	2512.5	2629.1	3501.7	5153.1	7925.9	11688.9	16372.3	18420.5	18457.9	18904.6	13718.2
67.5°	1391.1	1447.3	1862.8	2773.8	4633.5	8266.3	15957.9	20954.8	20990.2	20449.8	15065.6
69°	1088.1	1136.0	1462.9	2090.8	3141.4	5941.3	14440.9	21697.2	21802.4	20892.3	15113.5
70°	923.6	970.4	1259.9	1765.9	2526.0	4590.8	12854.0	21512.9	21624.3	20850.7	14756.4
72.5°	565.4	592.5	839.2	1243.2	1693.0	2309.5	7926.9	18193.5	18381.9	19126.4	12682.2
75°	381.1	395.7	524.8	858.0	1211.0	1189.1	4118.1	12823.8	13232.0	14878.2	9366.9
77.5°	272.8	286.3	351.9	555.0	848.6	785.1	1864.8	7969.6	8057.1	8923.4	5108.3
80°	155.1	167.6	248.9	330.1	575.8	523.7	741.4	3806.7	3850.5	3826.5	1705.5
82.5°	81.2	91.6	136.4	217.6	369.6	342.6	308.2	1274.5	1280.7	1065.2	373.8
85°	15.6	18.7	67.7	148.9	190.5	148.9	126.0	298.8	305.1	269.7	92.7
87.5°	0.0	1.0	27.1	33.3	37.5	38.5	40.6	58.3	62.5	84.3	25.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P322099

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2494.8	2494.8	2494.8	2494.8	2494.8	2494.8	2494.8	2494.8	2494.8	2494.8	2494.8
2.5°	2506.2	2468.8	2396.9	2313.6	2249.1	2185.5	2135.6	2083.5	2064.8	2055.4	2054.4
5°	2531.2	2452.1	2300.1	2143.9	2015.8	1895.0	1808.6	1726.4	1687.8	1670.1	1662.8
7.5°	2572.9	2445.9	2201.2	1962.7	1778.4	1627.4	1507.7	1418.2	1373.4	1354.6	1347.4
10°	2621.8	2437.5	2085.6	1771.1	1535.8	1379.6	1260.9	1172.4	1123.5	1102.7	1092.3
12.5°	2679.1	2422.9	1952.3	1577.5	1328.6	1172.4	1028.7	919.4	863.2	839.2	827.8
15°	2749.9	2408.4	1812.8	1395.3	1146.4	955.9	798.6	724.7	713.2	709.1	710.1
17.5°	2819.7	2385.5	1660.8	1215.1	954.8	746.6	666.4	662.2	664.3	664.3	664.3
20°	2882.1	2333.4	1495.2	1061.0	772.6	629.9	613.3	606.0	600.8	596.6	591.4
22.5°	2931.1	2263.6	1335.9	908.0	631.0	576.8	550.8	527.9	509.2	496.7	490.4
25°	2964.4	2171.0	1190.1	761.1	567.5	524.8	477.9	439.4	410.2	392.5	385.3
27.5°	2989.4	2071.0	1060.0	637.2	523.7	464.4	403.0	357.1	326.9	311.3	305.1
30°	3007.1	1957.5	945.4	560.2	474.8	400.9	335.3	290.5	268.6	260.3	256.1
32.5°	3023.7	1831.5	837.2	523.7	429.0	342.6	281.1	246.8	233.2	222.8	219.7
35°	3065.4	1714.9	734.1	485.2	382.1	292.6	241.6	216.6	203.0	196.8	194.7
37.5°	3164.3	1628.5	635.2	445.6	335.3	253.0	211.4	193.7	181.2	174.9	172.8
40°	3323.6	1584.8	551.9	403.0	289.5	222.8	191.6	174.9	161.4	152.0	149.9
42.5°	3557.9	1591.0	493.5	360.3	253.0	198.9	172.8	153.1	138.5	130.2	128.1
45°	3842.1	1636.8	452.9	318.6	222.8	180.1	152.0	131.2	117.7	110.4	108.3
47.5°	4150.4	1710.7	419.6	281.1	198.9	162.4	131.2	109.3	97.9	91.6	90.6
50°	4475.2	1782.6	385.3	244.7	178.1	144.7	110.4	90.6	81.2	76.0	73.9
52.5°	4804.2	1865.9	354.0	211.4	160.3	123.9	91.6	73.9	66.6	62.5	60.4
55°	5158.3	1928.4	323.8	185.3	142.6	105.2	76.0	61.4	55.2	50.0	48.9
57.5°	5574.8	2025.2	292.6	160.3	121.8	87.5	62.5	48.9	43.7	38.5	37.5
60°	6137.0	2138.7	259.3	141.6	100.0	71.8	51.0	39.6	33.3	29.2	28.1
62.5°	6878.4	2264.7	217.6	123.9	81.2	58.3	40.6	31.2	23.9	18.7	18.7
65°	7818.6	2469.8	178.1	104.1	66.6	47.9	31.2	22.9	13.5	8.3	8.3
67.5°	8367.3	2505.2	143.7	85.4	54.1	40.6	26.0	15.6	4.2	1.0	0.0
69°	8191.4	2300.1	121.8	72.9	46.9	38.5	23.9	11.5	2.1	0.0	0.0
70°	7860.3	2103.3	107.2	64.6	42.7	36.4	22.9	8.3	2.1	0.0	0.0
72.5°	6495.2	1497.3	81.2	47.9	31.2	32.3	20.8	5.2	2.1	0.0	0.0
75°	4731.4	910.0	58.3	33.3	19.8	23.9	14.6	2.1	1.0	0.0	0.0
77.5°	2632.2	429.0	36.4	18.7	12.5	14.6	7.3	0.0	0.0	0.0	0.0
80°	854.9	116.6	16.7	10.4	7.3	8.3	3.1	0.0	0.0	0.0	0.0
82.5°	158.3	33.3	9.4	5.2	2.1	2.1	0.0	0.0	0.0	0.0	0.0
85°	34.4	13.5	5.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.5	4.2	1.0	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)