

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: P321136

Luminaire Tested: **GAN-SA2D-830-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321136
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA2D-830-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12942 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

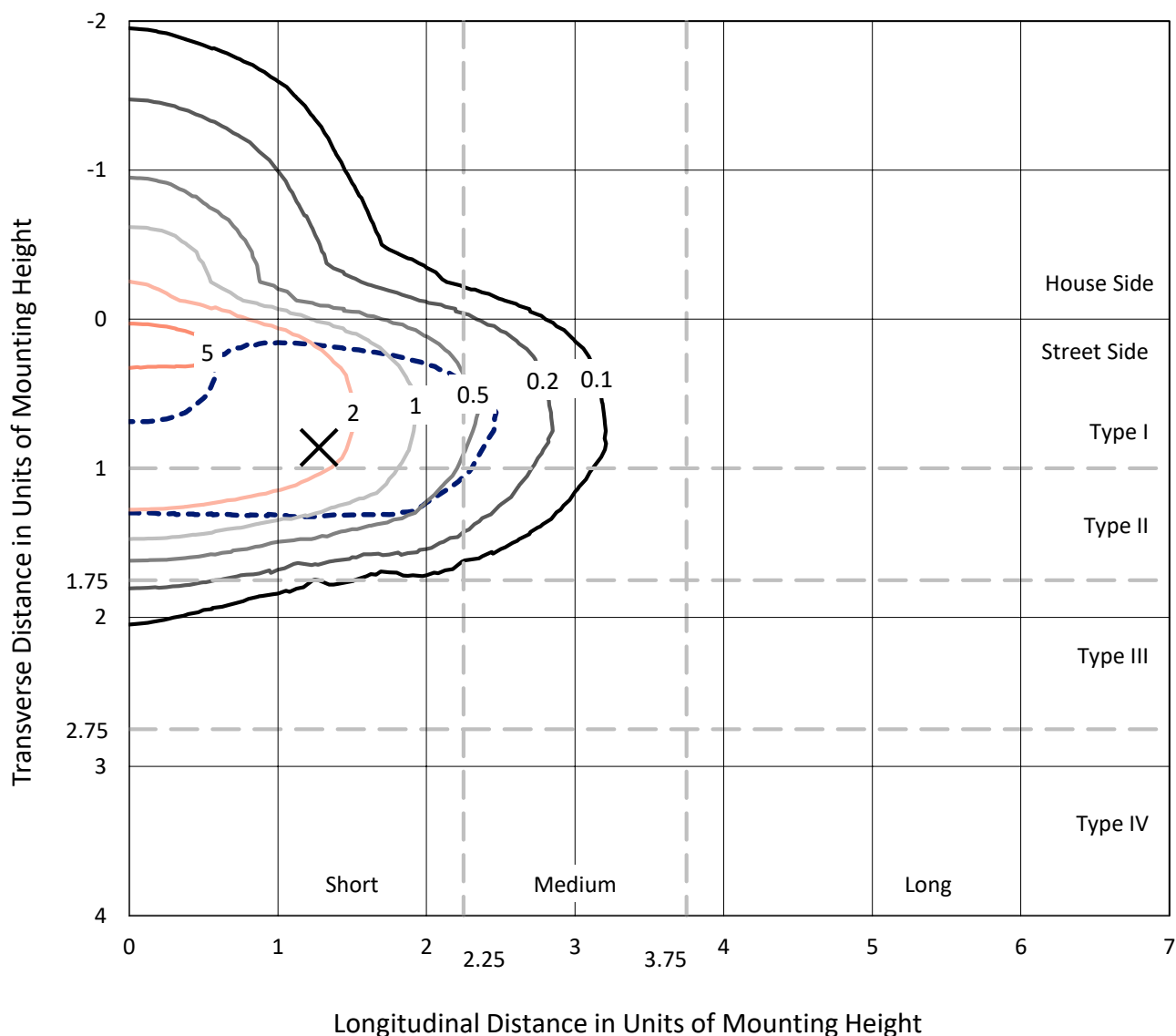
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P321136
 CATALOG NUMBER: GAN-SA2D-830-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

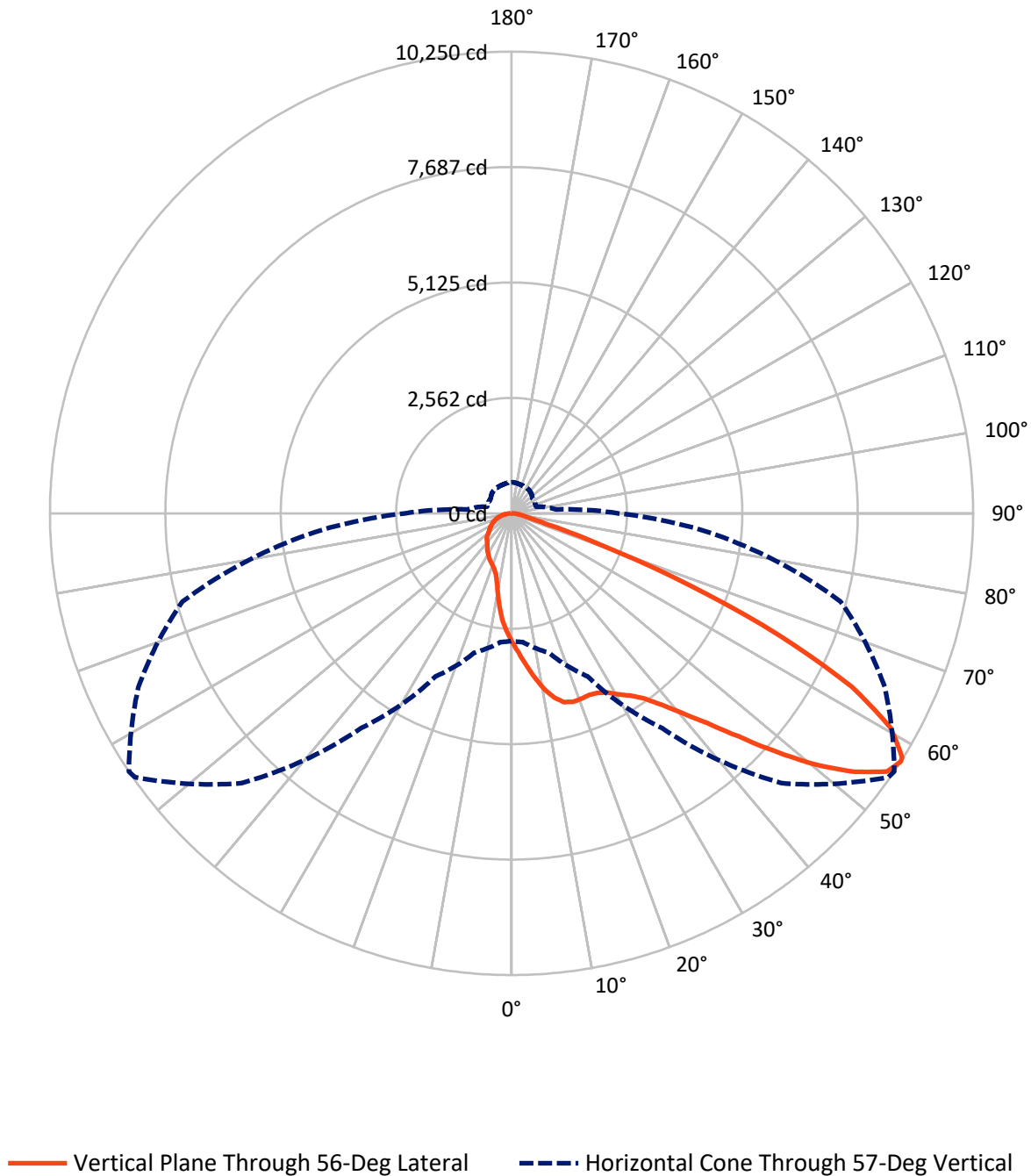
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
 Type II - Short - N/A

REPORT NUMBER: P321136
CATALOG NUMBER: GAN-SA2D-830-U-AFL

Luminous Intensity Polar Plot



REPORT NUMBER: P321136

CATALOG NUMBER: GAN-SA2D-830-U-AFL

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2230.9	0.0	2230.9
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	10711.1	0.0	10711.1
	% Fixture	82.8	0.0	82.8
Total	Lumens	12942.0	0.0	12942.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.2	2.1
10°-20°	775.3	6.0
20°-30°	1262.7	9.8
30°-40°	1887.7	14.6
40°-50°	2863.2	22.1
50°-60°	3209.1	24.8
60°-70°	1895.4	14.6
70°-80°	621.0	4.8
80°-90°	153.4	1.2
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°	12942.0	100.0
0°-180°	12942.0	100.0

Coefficient of Utilization



REPORT NUMBER: P321136

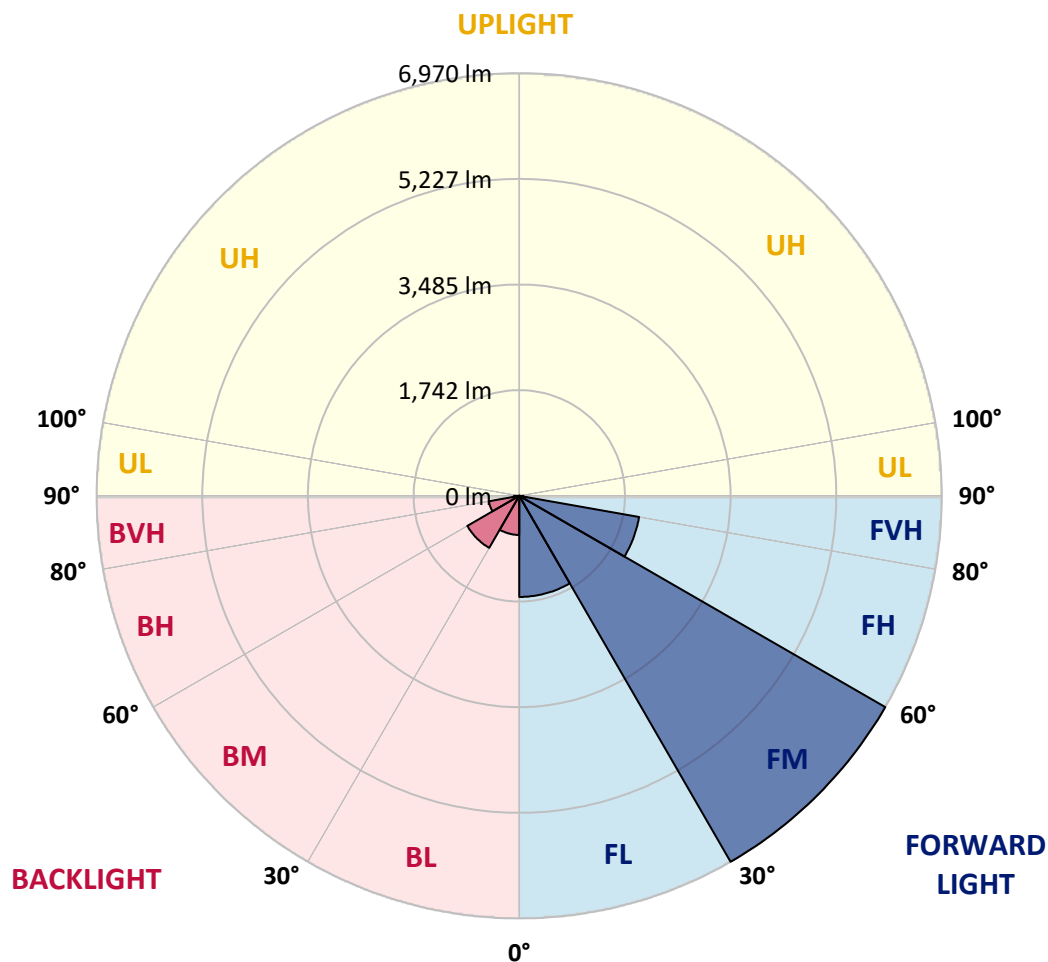
CATALOG NUMBER: GAN-SA2D-830-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1667.1	12.9			
FM	(30°-60°)	6969.7	53.9			
FH	(60°-80°)	2006.7	15.5			G2/5000
FVH	(80°-90°)	67.6	0.5			G1/100
BL	(0°-30°)	645.1	5.0	B2/1000		
BM	(30°-60°)	990.2	7.7	B1/1000		
BH	(60°-80°)	509.7	3.9	B2/1000		G2/1000
BVH	(80°-90°)	85.9	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





REPORT NUMBER: P321136

CATALOG NUMBER: GAN-SA2D-830-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	2870.5	2870.5	2870.5	2870.5	2870.5	2870.5	2870.5	2870.5	2870.5	2870.5	2870.5
2.5°	3296.2	3326.4	3313.1	3266.8	3231.3	3181.0	3125.0	3108.1	3048.9	2982.6	2903.0
5°	3817.9	3802.8	3781.0	3708.9	3632.9	3544.4	3403.8	3381.6	3249.9	3100.0	2941.7
7.5°	4115.0	4113.7	4100.8	4058.5	3989.1	3873.5	3704.0	3677.8	3479.0	3237.9	2992.4
10°	4071.9	4068.8	4090.1	4134.1	4155.0	4131.0	3988.3	3962.0	3717.8	3390.5	3051.1
12.5°	3826.8	3828.6	3862.8	3955.3	4081.2	4232.4	4209.3	4196.4	3965.6	3563.1	3122.3
15°	3636.0	3640.0	3667.1	3747.6	3896.2	4170.6	4343.6	4348.1	4205.3	3753.4	3205.5
17.5°	3552.4	3560.8	3573.3	3629.8	3765.9	4047.4	4375.7	4399.7	4415.2	3950.9	3285.5
20°	3579.1	3587.1	3590.6	3626.7	3738.3	3972.7	4353.4	4396.6	4576.2	4136.8	3365.6
22.5°	3698.7	3703.6	3705.8	3715.2	3801.9	3994.0	4338.7	4384.1	4692.8	4303.6	3426.1
25°	3897.1	3893.5	3879.3	3867.3	3925.5	4078.5	4372.5	4415.7	4787.5	4454.8	3465.7
27.5°	4134.6	4130.1	4102.6	4069.6	4103.0	4210.2	4469.9	4504.2	4872.5	4596.3	3485.7
30°	4419.7	4408.1	4356.1	4316.9	4329.8	4407.7	4630.5	4661.6	5003.7	4756.8	3505.2
32.5°	4749.3	4736.8	4661.6	4596.7	4596.7	4661.6	4796.0	4821.8	5114.9	4938.3	3536.8
35°	5162.0	5146.4	5048.6	4939.6	4908.9	4941.8	5021.5	5039.7	5315.0	5166.9	3594.2
37.5°	5648.6	5627.7	5500.9	5355.0	5287.9	5286.1	5343.5	5380.8	5634.8	5467.1	3691.6
40°	6136.5	6121.8	6011.1	5896.3	5764.7	5722.4	5810.9	5822.5	6052.9	5839.8	3816.1
42.5°	6513.7	6511.0	6490.5	6505.7	6370.9	6285.5	6354.9	6364.2	6563.5	6243.2	3948.7
45°	6712.9	6717.4	6816.5	7036.3	7086.1	7023.8	7058.1	7060.7	7147.0	6650.2	4070.1
47.5°	6553.2	6576.4	6827.2	7318.7	7726.5	7933.4	7876.4	7909.3	7712.8	6999.8	4165.3
50°	5931.0	5959.5	6386.5	7192.8	8025.4	8813.6	8783.8	8776.2	8169.1	7256.0	4216.9
52.5°	5160.2	5182.5	5534.7	6538.6	7806.2	9300.1	9573.7	9534.5	8574.7	7447.7	4226.7
55°	3986.5	4021.2	4358.7	5232.7	6919.3	9114.2	10154.6	10119.4	8944.3	7548.2	4215.1
57°	2834.1	2870.5	3205.9	3993.6	5820.7	8470.6	10212.4	10249.7	9144.0	7565.1	4228.0
57.5°	2529.0	2566.3	2898.6	3663.6	5478.2	8238.0	10162.6	10224.8	9180.1	7562.4	4235.1
60°	1273.4	1287.6	1499.3	2045.1	3463.0	6660.0	9512.7	9673.3	9212.5	7431.7	4265.8
62.5°	791.7	781.5	774.8	942.0	1684.8	4416.6	8171.8	8480.9	8591.2	7115.0	4191.5
65°	696.1	676.9	603.6	590.2	744.1	2145.1	6153.8	6538.6	7263.5	6616.0	4014.5
67.5°	653.8	635.1	552.4	502.6	503.0	850.4	3820.6	4253.8	5658.4	5772.2	3596.9
70°	610.2	593.3	515.9	457.2	428.3	471.0	1757.7	2086.4	3688.5	4537.1	3006.2
72.5°	554.2	542.6	469.2	408.7	378.1	352.7	672.9	794.8	2135.3	3047.1	2087.8
75°	495.5	484.8	422.1	364.3	326.9	277.5	378.9	408.3	1084.8	1558.9	1027.9
77.5°	431.0	424.8	375.4	322.0	292.2	229.9	268.2	282.4	465.2	668.5	515.5
80°	342.9	354.9	328.2	286.9	259.3	184.1	189.9	199.3	270.9	326.5	292.7
82.5°	223.3	244.2	257.1	233.1	213.5	145.0	136.5	140.5	176.6	199.3	127.2
85°	93.0	104.5	169.0	152.6	141.9	105.9	91.6	93.4	109.4	113.4	52.0
87.5°	41.4	44.0	74.3	69.8	60.0	36.5	39.1	42.7	58.3	55.2	20.0
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: P321136

CATALOG NUMBER: GAN-SA2D-830-U-AFL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2870.5	2870.5	2870.5	2870.5	2870.5	2870.5	2870.5	2870.5	2870.5	2870.5	2870.5
2.5°	2873.2	2835.9	2771.8	2701.1	2643.3	2597.0	2550.3	2518.3	2480.9	2460.9	2450.7
5°	2875.4	2802.1	2667.3	2529.0	2405.3	2292.3	2184.7	2102.0	2024.6	1982.8	1971.2
7.5°	2884.8	2774.5	2556.5	2328.8	2109.1	1908.5	1753.7	1656.8	1586.9	1555.8	1546.9
10°	2892.3	2742.0	2419.6	2082.4	1783.5	1580.3	1460.2	1405.9	1381.9	1377.9	1373.9
12.5°	2910.1	2708.7	2275.4	1825.3	1530.5	1389.9	1348.1	1344.5	1351.2	1361.0	1361.0
15°	2938.2	2675.7	2110.9	1604.7	1369.4	1320.1	1328.5	1348.1	1366.3	1381.5	1383.7
17.5°	2958.6	2635.3	1933.9	1428.2	1283.6	1297.0	1327.2	1354.8	1373.5	1388.1	1389.5
20°	2973.3	2572.6	1744.8	1293.4	1234.2	1275.6	1313.4	1337.9	1350.8	1365.4	1367.7
22.5°	2965.7	2488.5	1577.2	1196.9	1194.2	1244.5	1280.5	1309.8	1300.1	1285.8	1295.2
25°	2929.3	2372.8	1404.6	1124.8	1152.0	1202.7	1247.1	1227.6	1194.7	1188.4	1192.0
27.5°	2864.3	2225.2	1244.9	1058.1	1103.0	1164.0	1161.3	1141.7	1130.2	1122.2	1127.0
30°	2794.5	2065.1	1105.3	999.8	1048.8	1099.0	1088.8	1088.4	1076.8	1063.9	1070.1
32.5°	2725.6	1904.1	994.5	951.8	1007.8	1014.5	1036.8	1043.4	1020.7	993.6	991.8
35°	2665.5	1752.0	910.4	908.2	958.5	959.4	991.8	982.5	926.0	898.0	898.0
37.5°	2620.6	1600.3	846.4	869.1	893.5	916.7	933.1	894.4	885.1	869.5	869.1
40°	2601.0	1466.9	806.4	839.3	847.7	877.1	834.8	850.0	854.4	846.4	846.4
42.5°	2580.6	1350.8	771.7	816.6	815.3	811.3	789.9	809.5	827.3	827.7	826.4
45°	2560.1	1250.7	741.0	768.1	786.8	743.7	747.7	768.6	793.5	802.4	802.4
47.5°	2537.4	1171.5	713.0	717.0	745.9	717.0	713.9	729.9	759.2	773.5	776.6
50°	2487.6	1100.4	680.9	672.0	680.1	689.8	692.5	700.1	732.5	755.2	760.6
52.5°	2418.7	1036.8	640.0	630.7	630.7	667.6	680.1	682.3	709.9	737.0	742.3
55°	2361.3	996.3	597.8	596.0	594.2	644.0	665.4	668.9	688.1	709.4	712.1
57°	2365.3	993.2	565.3	567.1	566.6	620.0	651.6	659.1	668.9	687.2	690.3
57.5°	2367.5	995.4	558.2	559.1	558.6	613.3	647.6	656.0	663.6	682.7	685.8
60°	2400.9	1001.2	529.3	519.5	521.7	577.8	624.9	635.6	640.5	665.8	669.8
62.5°	2351.5	975.4	506.1	482.6	482.6	540.4	593.3	610.2	617.8	652.0	658.7
65°	2208.3	902.9	479.0	440.8	445.2	503.0	555.5	583.1	594.7	637.4	644.5
67.5°	1987.2	818.8	450.1	403.4	407.9	463.9	516.4	546.2	564.4	621.3	627.1
70°	1699.5	716.1	411.0	363.8	369.2	421.2	470.1	503.9	531.1	606.2	608.0
72.5°	1252.9	587.1	356.3	320.2	326.0	371.4	423.4	462.6	499.0	568.4	567.5
75°	745.0	459.0	295.8	276.2	280.2	322.5	381.2	428.8	483.5	553.7	562.2
77.5°	451.9	345.6	241.1	231.3	236.2	279.3	350.9	401.6	476.8	522.2	519.5
80°	273.1	246.8	192.6	186.4	191.3	238.8	324.7	381.2	416.7	446.1	446.1
82.5°	142.8	150.8	141.4	136.5	143.2	193.9	295.3	332.7	368.3	316.2	295.3
85°	58.3	78.7	85.8	85.4	89.4	134.3	254.9	284.7	237.5	225.5	230.8
87.5°	19.6	33.4	41.8	36.0	37.8	84.5	176.6	137.4	163.2	113.9	108.1
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)