

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: P323023

Luminaire Tested: **GAN-SA9D-827-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P323023
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA9D-827-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36959 lumens
Efficiency: N/A
Efficacy: 64.3 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G5

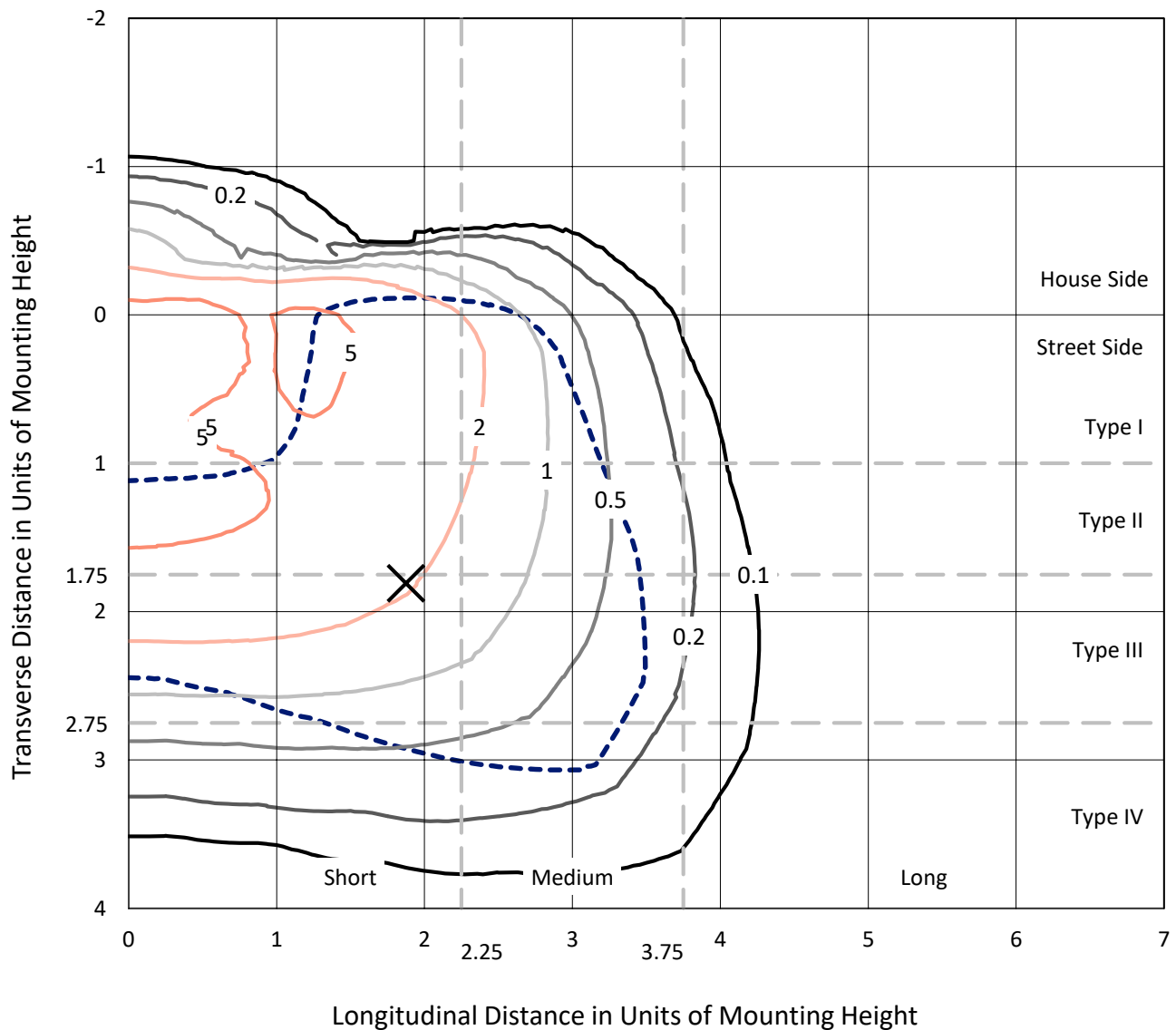
Input Watts (W): 575
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

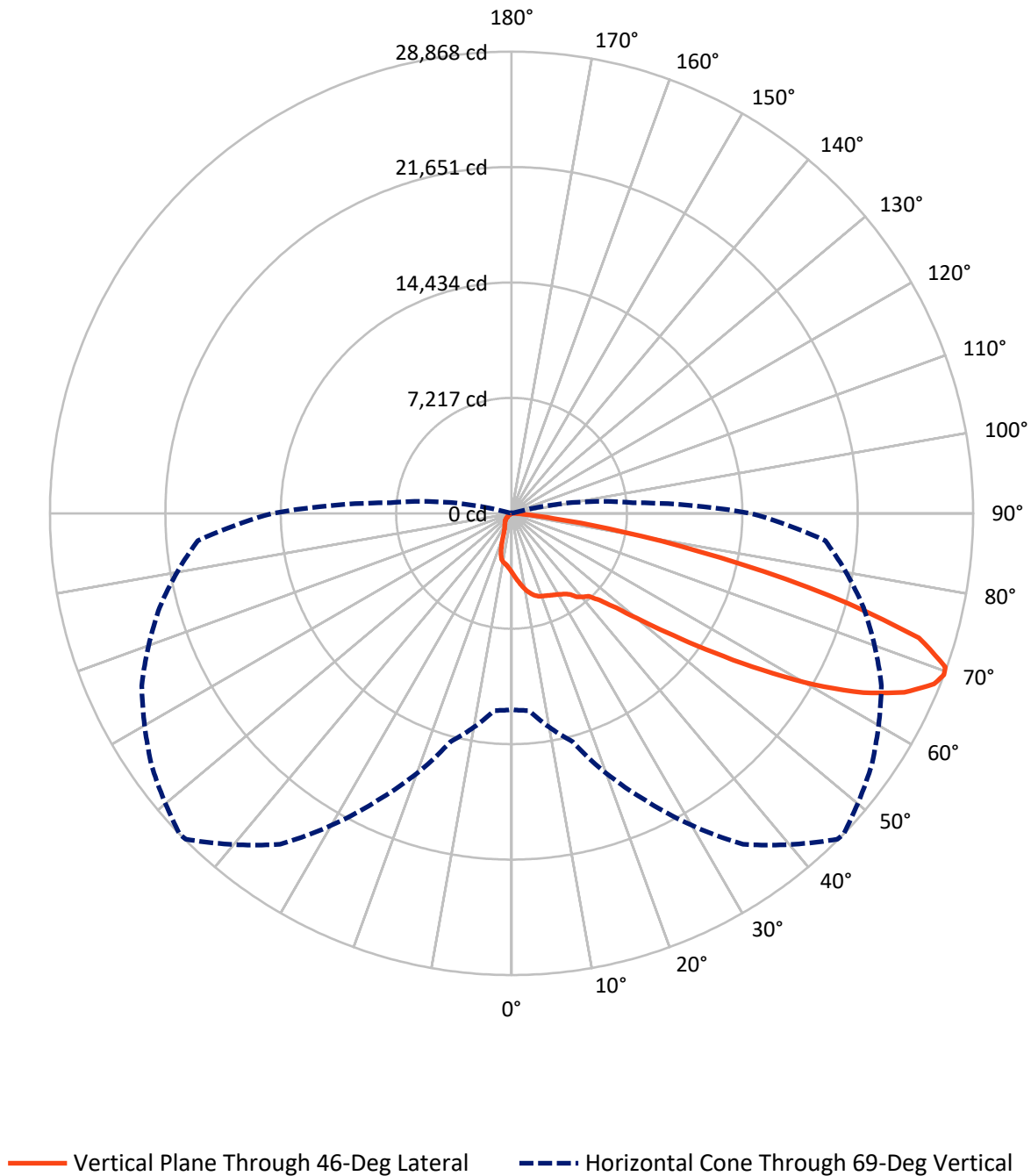
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3793.0	0.0	3793.0
	% Fixture	10.3	0.0	10.3
Street Side	Lumens	33166.0	0.0	33166.0
	% Fixture	89.7	0.0	89.7
Total	Lumens	36959.0	0.0	36959.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	368.6	1.0
10°-20°	1118.2	3.0
20°-30°	1758.6	4.8
30°-40°	2521.8	6.8
40°-50°	4358.7	11.8
50°-60°	8610.9	23.3
60°-70°	12034.5	32.6
70°-80°	5814.0	15.7
80°-90°	373.7	1.0
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°	36959.0	100.0
0°-180°	36959.0	100.0

Coefficient of Utilization



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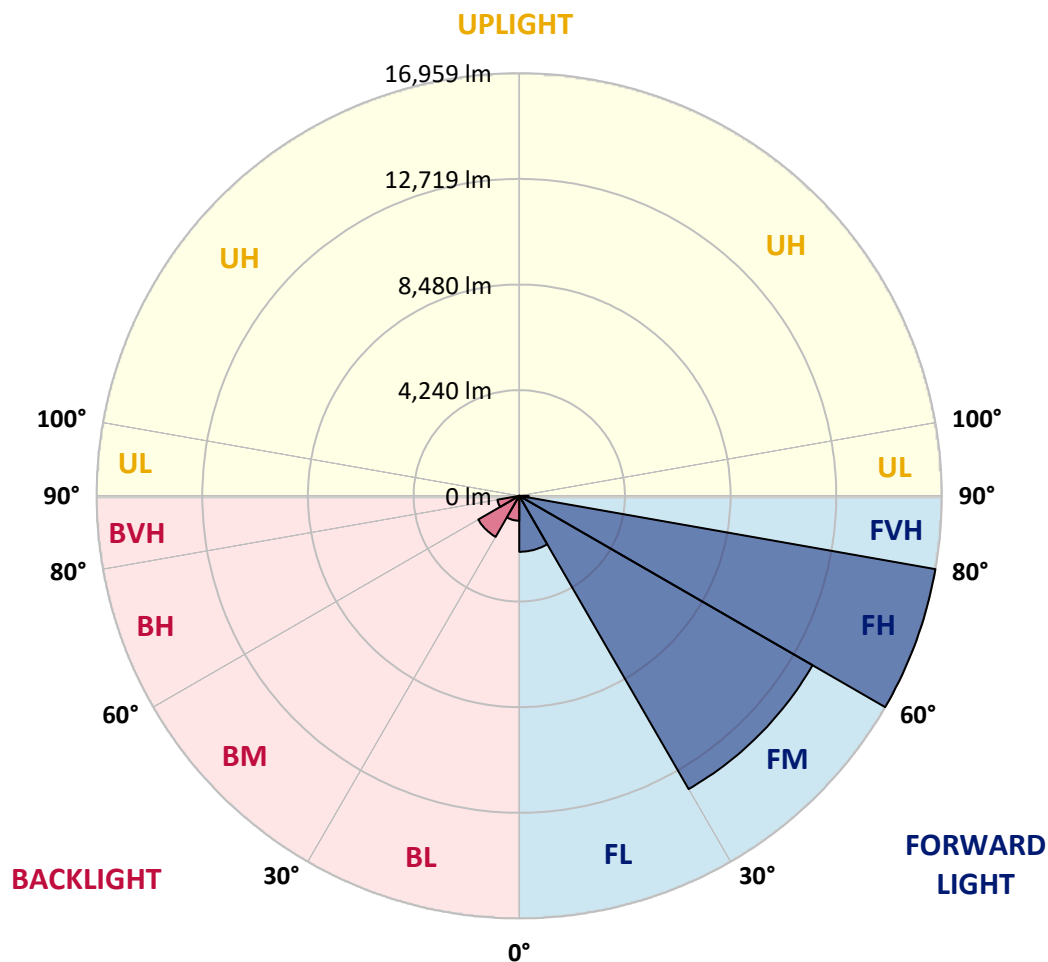
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2245.7	6.1			
FM	(30°-60°)	13590.6	36.8			
FH	(60°-80°)	16959.1	45.9			G5
FVH	(80°-90°)	370.5	1.0			G3/500
BL	(0°-30°)	999.7	2.7	B2/1000		
BM	(30°-60°)	1900.8	5.1	B2/2500		
BH	(60°-80°)	889.4	2.4	B2/1000		G2/1000
BVH	(80°-90°)	3.1	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	3703.2	3703.2	3703.2	3703.2	3703.2	3703.2	3703.2	3703.2	3703.2	3703.2	3703.2
2.5°	4113.8	4108.6	4084.4	4074.0	4015.1	3980.4	3966.6	3923.2	3860.8	3798.5	3729.1
5°	4581.7	4580.0	4534.9	4491.6	4380.7	4276.7	4257.7	4157.2	4016.8	3885.1	3753.4
7.5°	5060.0	5037.5	4992.4	4909.2	4748.1	4581.7	4566.1	4424.0	4224.7	4034.1	3845.2
10°	5465.5	5451.6	5392.7	5266.2	5077.3	4888.4	4869.4	4694.4	4469.1	4235.1	3994.3
12.5°	5780.9	5770.5	5692.5	5534.8	5333.8	5138.0	5112.0	4956.0	4715.2	4453.5	4169.3
15°	5973.2	5968.0	5872.7	5704.6	5507.1	5337.3	5314.7	5177.8	4954.3	4680.5	4359.9
17.5°	6018.3	6020.0	5921.2	5751.4	5588.5	5467.2	5449.9	5345.9	5158.8	4886.7	4550.5
20°	5917.8	5938.6	5850.2	5702.9	5602.4	5538.3	5524.4	5462.0	5304.3	5047.9	4703.0
22.5°	5775.7	5786.1	5725.4	5626.6	5585.1	5597.2	5590.3	5555.6	5422.2	5186.5	4853.8
25°	5689.0	5689.0	5652.6	5569.5	5597.2	5671.7	5673.4	5666.5	5560.8	5356.3	5037.5
27.5°	5685.6	5675.2	5633.6	5571.2	5647.4	5761.8	5768.7	5815.5	5749.7	5562.5	5266.2
30°	5824.2	5812.1	5723.7	5642.2	5739.3	5862.3	5879.6	5981.9	5949.0	5786.1	5520.9
32.5°	6148.2	6104.9	5909.1	5775.7	5848.5	5995.7	6018.3	6181.2	6233.2	6061.6	5767.0
35°	6591.9	6455.0	6172.5	6028.7	6035.6	6189.8	6210.6	6449.8	6604.0	6314.6	5957.6
37.5°	7203.6	7136.0	6676.8	6292.1	6323.3	6557.2	6617.8	6877.8	6834.5	6453.2	6174.2
40°	8544.8	8439.1	7950.4	7030.3	6598.8	6855.3	6874.3	7012.9	7016.4	6766.9	6624.8
42.5°	10371.3	10327.9	9813.3	8369.8	7141.2	7054.5	7089.2	7323.1	7584.8	7428.8	7421.9
45°	12393.5	12371.0	11825.1	10147.7	8238.1	7707.8	7751.1	8064.8	8565.6	8600.3	8820.3
47.5°	14020.7	14010.3	13696.6	12131.9	9917.2	8815.1	8829.0	9161.7	10042.0	10477.0	10828.7
50°	15504.0	15554.3	15306.5	14278.9	12204.6	10549.7	10516.8	10738.6	12152.7	12864.9	13301.5
52.5°	17566.2	17637.2	16942.3	16282.1	14604.7	12702.0	12676.0	12908.2	14689.6	15223.3	15301.3
55°	19387.4	19266.1	18716.8	18526.2	17531.5	15360.2	15353.3	15557.8	17143.3	17370.3	17514.2
57.5°	20191.5	20144.7	20409.8	20846.5	20597.0	18501.9	18486.3	18330.4	19338.9	19363.1	19805.0
60°	20699.2	20756.4	21569.1	22915.5	23537.6	21882.7	21782.2	20830.9	21435.7	21381.9	21855.0
62.5°	20318.0	20430.6	21893.1	24137.2	25738.4	24833.8	24691.7	23121.7	23227.5	23042.0	23482.2
65°	18294.0	18469.0	20865.5	23906.7	26830.1	27140.3	26996.5	25144.0	24650.1	24345.2	24100.8
67.5°	14854.2	14958.2	17460.4	21901.8	26338.0	28516.2	28486.7	26916.7	25724.5	24125.1	22229.3
69°	12275.7	12377.9	14786.6	19791.2	25254.9	28810.8	28868.0	27485.1	25520.0	22787.3	19695.9
70°	10397.2	10506.4	12750.5	17982.0	23998.6	28673.9	28776.1	27431.4	24934.3	21238.1	17472.6
72.5°	5453.4	5546.9	7849.9	12388.3	19564.2	26329.3	26639.5	25112.8	21135.9	15424.3	10331.4
75°	1713.8	1767.5	3065.5	6475.8	13395.1	20472.2	20543.2	19699.3	15008.4	8484.2	4302.7
77.5°	653.3	637.7	1020.7	2386.2	6772.1	12890.9	13325.8	12310.3	7875.9	2999.6	992.9
80°	351.8	353.5	530.3	987.7	2897.4	6624.8	6992.2	5966.3	2798.6	935.8	228.7
82.5°	152.5	159.4	298.1	523.3	1330.8	2443.4	2627.0	2186.9	1069.2	629.0	84.9
85°	32.9	36.4	143.8	284.2	542.4	686.2	719.1	708.7	681.0	488.7	32.9
87.5°	0.0	0.0	64.1	102.2	136.9	156.0	136.9	178.5	376.0	329.2	17.3
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°	3703.2	3703.2	3703.2	3703.2	3703.2	3703.2	3703.2	3703.2	3703.2	3703.2	3703.2
2.5°	3706.6	3675.4	3621.7	3562.8	3521.2	3477.9	3443.2	3427.6	3410.3	3398.2	3413.8
5°	3699.7	3639.0	3535.1	3434.6	3361.8	3302.9	3254.3	3235.3	3216.2	3202.4	3200.6
7.5°	3760.3	3675.4	3516.0	3368.7	3256.1	3176.4	3110.5	3082.8	3060.3	3049.9	3041.2
10°	3876.4	3767.3	3554.1	3361.8	3216.2	3081.1	2939.0	2829.8	2758.7	2725.8	2713.7
12.5°	4027.2	3890.3	3626.9	3398.2	3186.8	2926.8	2625.3	2365.4	2197.3	2141.8	2108.9
15°	4204.0	4034.1	3722.2	3445.0	3079.3	2604.5	2093.3	1753.7	1597.7	1566.5	1531.9
17.5°	4373.8	4186.6	3836.6	3453.6	2843.6	2081.2	1533.6	1303.1	1242.5	1263.3	1268.5
20°	4522.8	4337.4	3949.2	3377.4	2415.6	1561.3	1187.0	1129.8	1152.4	1192.2	1199.1
22.5°	4673.6	4482.9	4053.2	3176.4	1868.0	1185.3	1069.2	1083.0	1105.6	1145.4	1152.4
25°	4857.2	4659.7	4150.2	2807.3	1401.9	1008.5	1015.5	1036.3	1058.8	1095.2	1098.6
27.5°	5068.7	4883.2	4214.4	2327.3	1039.7	927.1	949.6	980.8	1003.3	1038.0	1044.9
30°	5349.4	5177.8	4235.1	1829.9	871.6	854.3	864.7	902.8	935.8	966.9	972.1
32.5°	5612.8	5469.0	4165.8	1381.1	807.5	786.7	786.7	809.3	847.4	876.8	883.8
35°	5855.4	5761.8	3944.0	1010.3	759.0	724.3	707.0	707.0	731.3	755.5	762.5
37.5°	6176.0	6172.5	3585.3	805.8	712.2	672.4	636.0	608.2	599.6	604.8	608.2
40°	6725.3	6730.5	3117.4	722.6	672.4	618.6	563.2	512.9	466.1	450.5	448.8
42.5°	7583.1	7505.1	2627.0	682.8	637.7	563.2	480.0	412.4	339.6	317.1	315.4
45°	8945.1	8482.4	2107.2	646.4	601.3	500.8	396.8	305.0	246.1	228.7	228.7
47.5°	10929.2	9766.5	1632.4	606.5	552.8	429.8	299.8	220.1	180.2	171.6	173.3
50°	12981.0	11024.6	1251.1	556.3	493.9	355.2	221.8	159.4	136.9	136.9	138.6
52.5°	14800.5	11946.4	975.6	502.5	421.1	279.0	168.1	124.8	114.4	112.6	114.4
55°	16503.9	12540.8	746.9	440.2	334.4	207.9	128.2	102.2	95.3	91.8	90.1
57.5°	18146.7	12835.4	559.7	355.2	242.6	150.8	102.2	86.6	79.7	74.5	72.8
60°	19240.1	12596.3	384.7	261.7	168.1	109.2	84.9	74.5	65.8	60.7	58.9
62.5°	19857.0	11943.0	247.8	188.9	119.6	81.4	67.6	62.4	50.3	45.1	45.1
65°	19607.5	10865.1	173.3	135.2	86.6	60.7	50.3	50.3	36.4	29.5	27.7
67.5°	17375.5	9179.0	131.7	100.5	62.4	45.1	38.1	43.3	22.5	13.9	13.9
69°	14949.5	7607.3	112.6	83.2	52.0	36.4	32.9	39.9	15.6	10.4	8.7
70°	12993.1	6562.4	102.2	72.8	43.3	31.2	29.5	38.1	15.6	8.7	6.9
72.5°	7773.7	3659.8	78.0	52.0	27.7	24.3	24.3	43.3	15.6	8.7	6.9
75°	3141.7	1289.3	57.2	36.4	20.8	20.8	29.5	55.5	13.9	6.9	5.2
77.5°	712.2	282.5	32.9	22.5	13.9	20.8	34.7	43.3	8.7	3.5	0.0
80°	173.3	69.3	20.8	13.9	8.7	15.6	26.0	24.3	1.7	0.0	0.0
82.5°	57.2	24.3	8.7	6.9	1.7	5.2	12.1	6.9	0.0	0.0	0.0
85°	24.3	13.9	3.5	1.7	0.0	0.0	1.7	0.0	0.0	0.0	0.0
87.5°	15.6	5.2	0.0	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)