

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: P270974

Luminaire Tested: **NVN-AF-04-LED-U-AFL-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P270974
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24160)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-AF-04-LED-U-AFL-7027-600
Description: NAVION ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14309 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

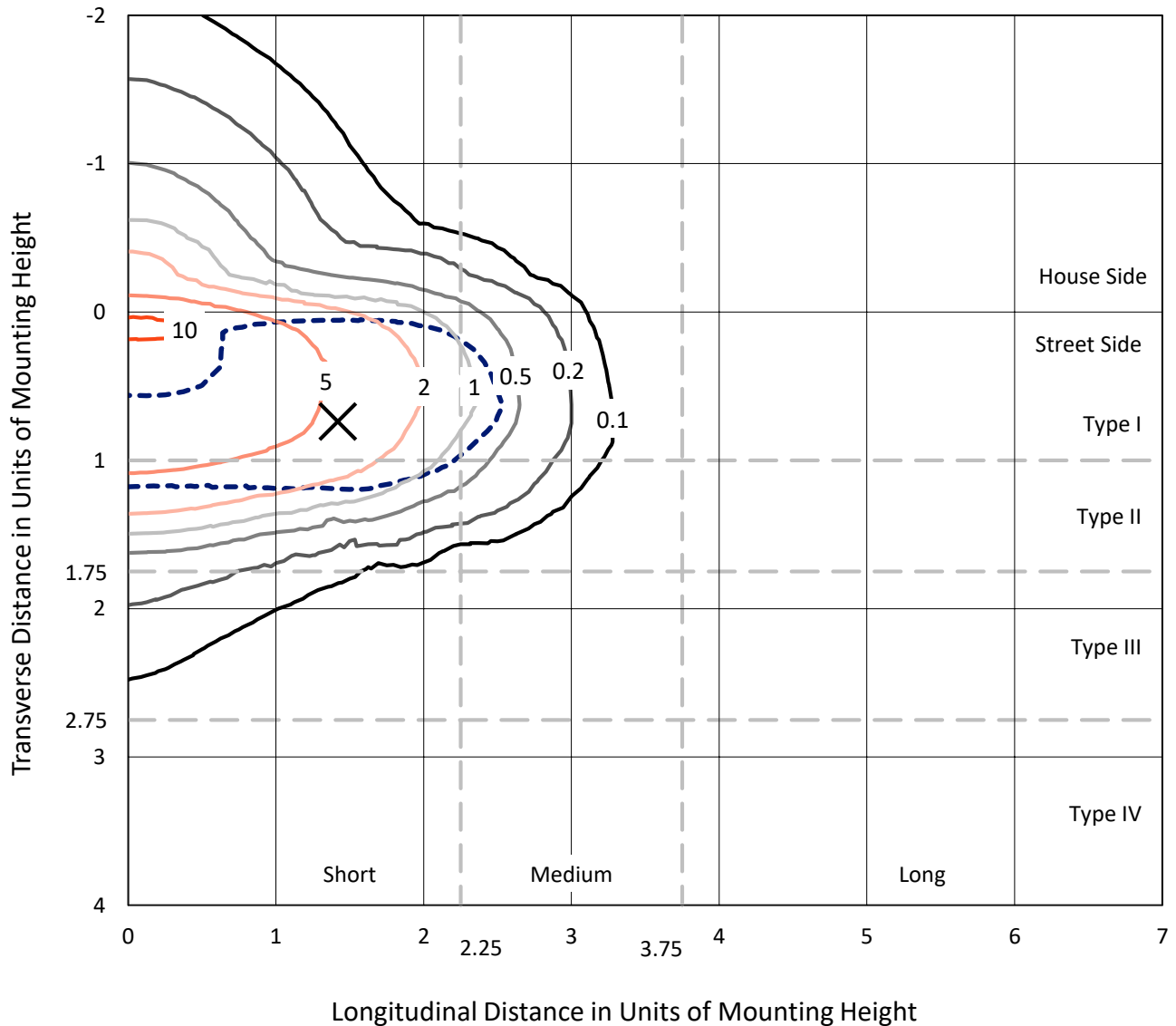
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

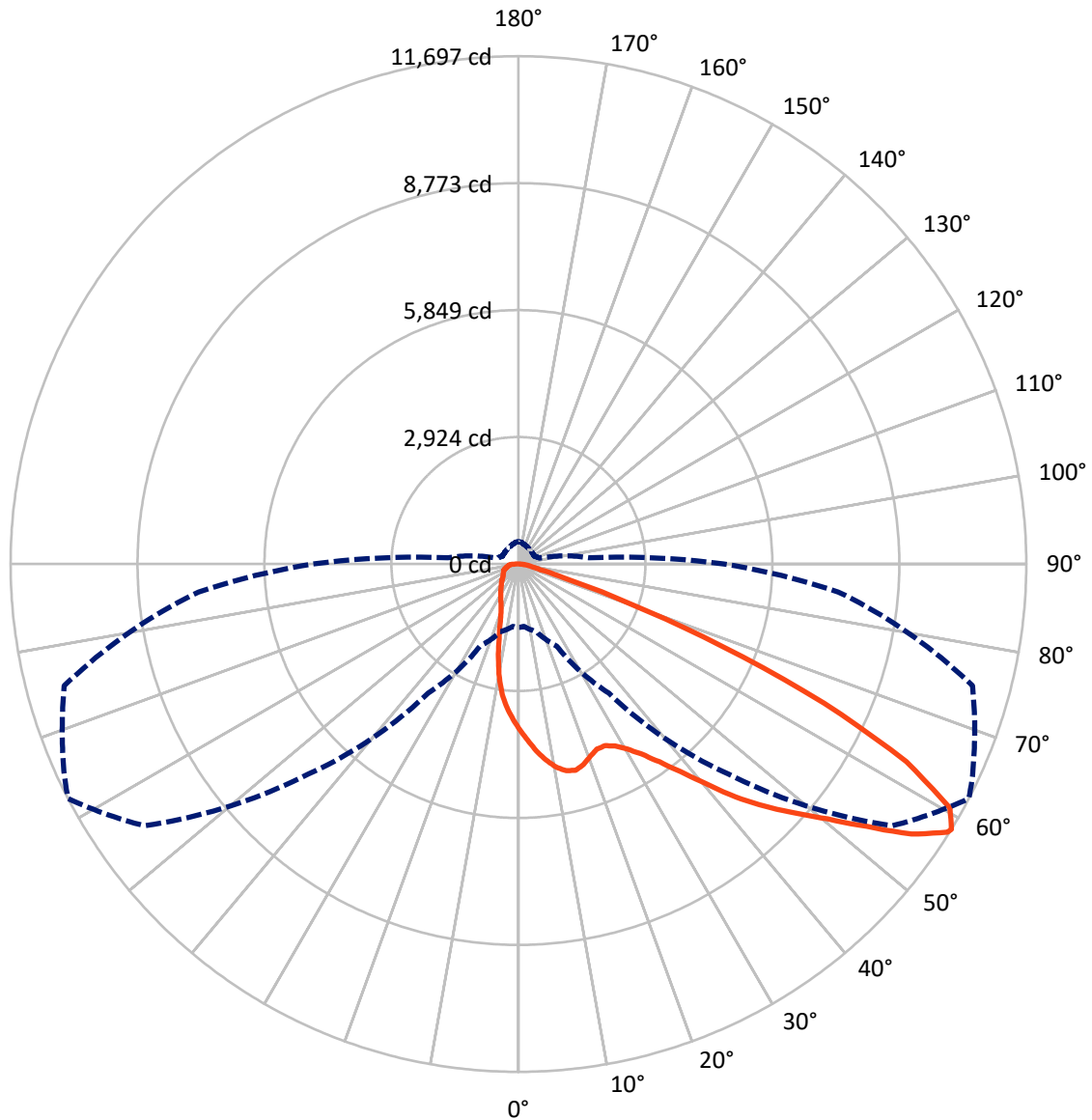
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 11.2 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2197.0	0.0	2197.0
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	12112.0	0.0	12112.0
	% Fixture	84.6	0.0	84.6
Total	Lumens	14309.0	0.0	14309.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	341.5	2.4
10°-20°	861.8	6.0
20°-30°	1396.7	9.8
30°-40°	2229.9	15.6
40°-50°	3243.5	22.7
50°-60°	3394.0	23.7
60°-70°	2069.1	14.5
70°-80°	578.6	4.0
80°-90°	194.0	1.4
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°	14309.0	100.0
0°-180°	14309.0	100.0

Coefficient of Utilization



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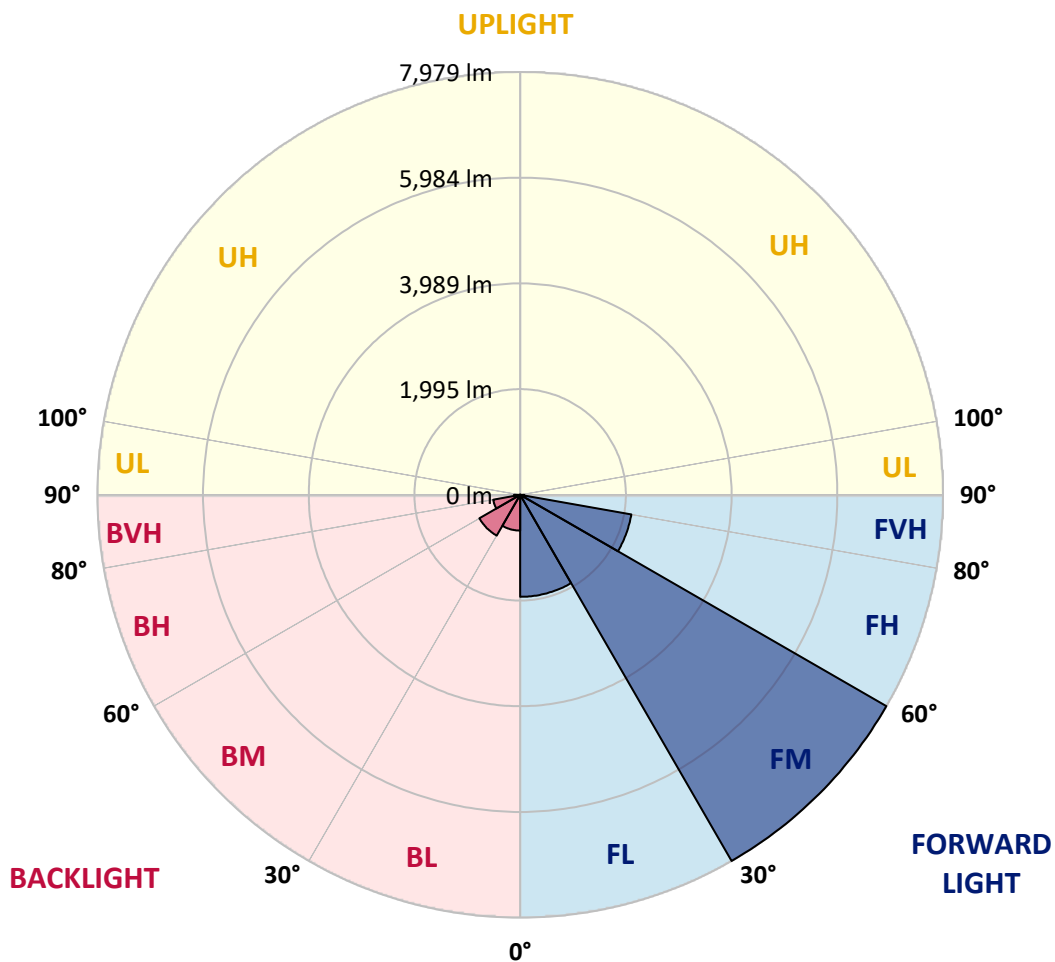
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1924.6	13.5			
FM	(30°-60°)	7978.9	55.8			
FH	(60°-80°)	2130.5	14.9			G2/5000
FVH	(80°-90°)	78.0	0.5			G1/100
BL	(0°-30°)	675.4	4.7	B2/1000		
BM	(30°-60°)	888.5	6.2	B1/1000		
BH	(60°-80°)	517.2	3.6	B2/1000		G2/1000
BVH	(80°-90°)	115.9	0.8			G2/225
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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	3820.4	3820.4	3820.4	3820.4	3820.4	3820.4	3820.4	3820.4	3820.4	3820.4	3820.4
2.5°	4336.4	4333.8	4297.0	4272.9	4244.3	4178.1	4111.9	4062.8	4037.7	3942.0	3849.1
5°	4695.0	4684.3	4663.7	4637.8	4600.2	4517.0	4412.5	4322.1	4286.4	4116.5	3945.6
7.5°	4505.4	4522.4	4585.9	4657.4	4732.6	4738.0	4663.7	4556.5	4517.0	4289.9	4039.5
10°	3980.5	3973.4	4053.0	4192.4	4440.1	4685.2	4807.6	4755.0	4713.9	4454.4	4133.5
12.5°	3821.3	3819.6	3833.0	3868.7	4024.2	4360.6	4771.1	4885.5	4871.1	4628.8	4233.6
15°	3869.5	3871.3	3870.4	3875.0	3917.9	4077.9	4566.3	4929.3	4974.1	4801.4	4335.5
17.5°	4024.2	4018.1	3998.4	3976.9	3983.2	4040.3	4345.5	4854.3	4988.4	4955.3	4421.4
20°	4263.0	4263.0	4210.4	4150.3	4111.1	4123.6	4253.3	4725.4	4922.3	5085.8	4485.7
22.5°	4562.8	4567.2	4489.3	4380.2	4290.8	4256.8	4306.0	4629.8	4841.7	5206.5	4543.0
25°	4934.7	4933.9	4820.2	4663.7	4522.4	4441.0	4440.1	4634.3	4816.6	5347.9	4602.9
27.5°	5395.3	5353.2	5220.9	4998.2	4798.7	4674.5	4618.1	4747.0	4869.4	5521.3	4683.5
30°	5914.8	5872.0	5698.4	5412.3	5142.2	4960.6	4867.6	4941.8	5030.4	5742.2	4805.0
32.5°	6429.1	6439.0	6235.0	5912.1	5565.2	5309.4	5171.7	5217.3	5279.0	6012.4	4969.6
35°	7182.0	7181.2	6914.7	6511.4	6099.0	5744.9	5570.5	5594.6	5651.1	6393.2	5200.3
37.5°	7743.7	7734.8	7563.0	7206.3	6742.0	6317.3	6065.0	6068.7	6117.0	6871.8	5504.4
40°	7800.9	7799.2	7798.2	7747.3	7429.8	7029.1	6713.5	6648.1	6667.8	7379.7	5827.2
42.5°	7363.5	7428.9	7616.6	7904.6	7993.2	7783.0	7484.3	7338.6	7295.7	7962.8	6168.8
45°	6740.3	6773.4	7102.4	7749.9	8276.7	8491.3	8266.8	7959.3	7886.0	8529.8	6447.0
47.5°	6450.5	6436.3	6626.6	7332.2	8249.0	9054.6	9070.7	8566.4	8442.1	9019.0	6683.8
50°	5829.0	5810.1	6050.8	6718.0	7946.6	9334.6	9896.3	9228.2	8998.3	9483.9	6898.5
52.5°	4590.3	4572.6	4895.4	5754.7	7270.6	9229.9	10591.9	10040.3	9648.5	9932.0	7098.9
55°	2987.0	2988.8	3296.4	4182.6	5883.5	8620.0	10918.4	10978.4	10539.3	10380.0	7260.7
57.5°	1644.5	1629.3	1848.5	2393.2	4047.6	7234.8	10646.5	11654.4	11425.5	10764.6	7377.9
58°	1462.3	1444.2	1613.3	2082.8	3629.1	6843.9	10509.7	11697.3	11539.1	10828.1	7394.8
60°	1041.9	1011.4	985.5	1174.3	2090.8	4934.7	9597.5	11419.3	11572.1	10955.1	7378.8
62.5°	878.3	843.2	750.4	743.2	984.6	2413.7	7589.9	10028.6	10457.0	10662.6	7119.4
65°	815.7	780.6	658.2	614.4	668.0	1041.9	4693.3	7743.7	8316.0	9645.8	6466.5
67.5°	770.8	729.8	598.4	541.0	551.7	623.3	1991.6	5064.4	5728.0	7521.9	5187.8
70°	730.6	685.0	550.9	484.7	475.7	473.9	778.0	2644.4	3283.8	4922.3	3475.3
72.5°	685.0	640.3	508.9	438.3	418.5	384.6	467.7	1092.8	1498.0	2412.8	1592.8
75°	618.8	582.2	462.4	399.7	365.8	312.2	345.2	524.0	645.7	923.7	739.6
77.5°	544.6	515.1	414.9	367.5	322.0	254.8	263.8	355.0	398.8	520.5	428.3
80°	385.5	396.2	362.1	323.7	283.4	205.7	202.9	260.1	286.2	349.7	287.9
82.5°	265.5	273.7	295.2	255.7	229.0	160.1	149.4	180.6	194.0	211.0	139.4
85°	189.6	184.2	204.9	183.3	168.2	102.0	95.7	114.4	122.4	128.7	67.1
87.5°	115.3	114.4	118.0	94.9	87.7	51.8	47.4	54.5	58.1	56.4	32.2
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°	3820.4	3820.4	3820.4	3820.4	3820.4	3820.4	3820.4	3820.4	3820.4	3820.4	3820.4
2.5°	3814.2	3770.4	3674.6	3597.7	3514.6	3451.1	3387.6	3351.8	3312.5	3290.1	3287.3
5°	3856.2	3766.8	3562.9	3373.2	3178.4	3003.0	2831.3	2704.3	2600.7	2541.6	2538.0
7.5°	3902.6	3762.3	3447.4	3119.3	2772.3	2427.1	2122.2	1906.7	1768.0	1703.6	1699.1
10°	3938.4	3743.4	3307.1	2796.5	2246.4	1790.4	1513.1	1386.2	1344.1	1333.4	1331.6
12.5°	3981.4	3730.1	3130.1	2382.3	1717.0	1362.9	1278.8	1270.8	1279.7	1285.0	1286.1
15°	4021.6	3704.2	2891.3	1923.6	1344.1	1218.0	1219.8	1236.7	1254.8	1262.7	1263.6
17.5°	4040.3	3640.7	2577.3	1515.8	1176.1	1152.7	1173.2	1195.6	1211.8	1218.0	1218.0
20°	4040.3	3538.8	2213.3	1227.9	1088.3	1092.8	1117.9	1134.9	1138.4	1133.0	1130.3
22.5°	4023.4	3412.7	1859.2	1071.4	1016.8	1033.8	1053.5	1041.9	999.9	967.7	961.4
25°	4008.1	3263.3	1518.6	975.6	954.2	976.5	968.6	889.0	824.6	791.4	786.0
27.5°	3983.2	3082.7	1234.1	897.0	893.5	911.3	831.7	754.8	722.5	704.7	701.1
30°	3976.9	2886.8	1033.0	827.2	833.4	808.5	717.2	692.1	685.0	675.2	670.8
32.5°	3997.5	2691.0	906.7	769.9	776.2	694.0	659.0	662.7	661.8	649.3	644.9
35°	4053.8	2500.4	826.4	718.1	700.1	621.5	625.9	636.7	636.7	621.5	616.1
37.5°	4152.1	2323.3	775.3	674.3	612.6	584.0	595.5	609.9	609.9	599.2	594.7
40°	4256.8	2150.8	736.9	639.5	557.2	558.0	569.6	580.3	584.8	586.7	583.1
42.5°	4351.6	1971.9	695.7	601.9	532.1	538.4	543.7	551.7	570.6	583.1	581.4
45°	4407.1	1792.2	651.0	555.3	515.1	517.9	515.9	530.3	552.6	571.4	571.4
47.5°	4458.1	1644.5	614.4	508.9	498.1	498.1	492.8	507.1	527.7	550.0	551.7
50°	4506.3	1548.9	588.4	473.0	476.7	473.9	472.1	485.7	513.3	540.2	544.6
52.5°	4555.6	1516.7	565.3	447.1	454.4	450.7	452.4	471.3	502.6	530.3	534.9
55°	4624.4	1537.3	541.0	429.3	432.9	431.9	439.1	460.7	488.3	515.9	517.9
57.5°	4709.4	1612.4	520.5	415.8	412.2	417.6	429.3	449.8	476.7	509.8	512.5
58°	4726.3	1630.3	517.0	412.2	407.8	415.8	427.5	447.1	474.8	509.8	512.5
60°	4752.3	1693.8	507.9	405.1	392.6	406.9	421.2	440.9	471.3	514.2	519.6
62.5°	4627.1	1706.3	505.2	397.1	376.5	394.4	411.3	433.7	467.7	529.5	541.0
65°	4193.4	1577.6	486.5	383.7	363.1	384.6	402.4	428.3	478.4	575.0	580.3
67.5°	3366.0	1310.2	440.9	363.1	347.9	372.9	395.3	428.3	482.8	582.2	585.8
70°	2314.5	984.6	383.7	340.7	329.9	358.7	392.6	438.3	467.7	550.9	540.2
72.5°	1209.1	685.0	336.2	314.8	308.6	346.0	418.5	428.3	449.8	514.2	503.5
75°	609.1	466.0	296.0	285.3	284.5	341.6	468.6	412.2	431.0	483.7	507.1
77.5°	359.5	364.9	263.8	257.5	262.0	333.6	469.5	396.2	409.5	445.4	470.4
80°	246.0	301.4	238.8	237.1	240.6	306.7	432.9	376.5	384.6	421.2	448.1
82.5°	138.6	166.4	209.2	221.0	219.0	251.3	373.9	342.6	352.3	498.1	526.8
85°	67.1	100.3	175.3	206.6	186.8	167.3	304.0	304.0	306.7	356.8	361.3
87.5°	25.1	44.7	118.0	163.6	130.6	100.3	206.6	215.6	239.7	246.9	252.2
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)