

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: P198679

Luminaire Tested: **XNV2-AF-02-LED-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198679
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: XNV2-AF-02-LED-U-AFL
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12638.6 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

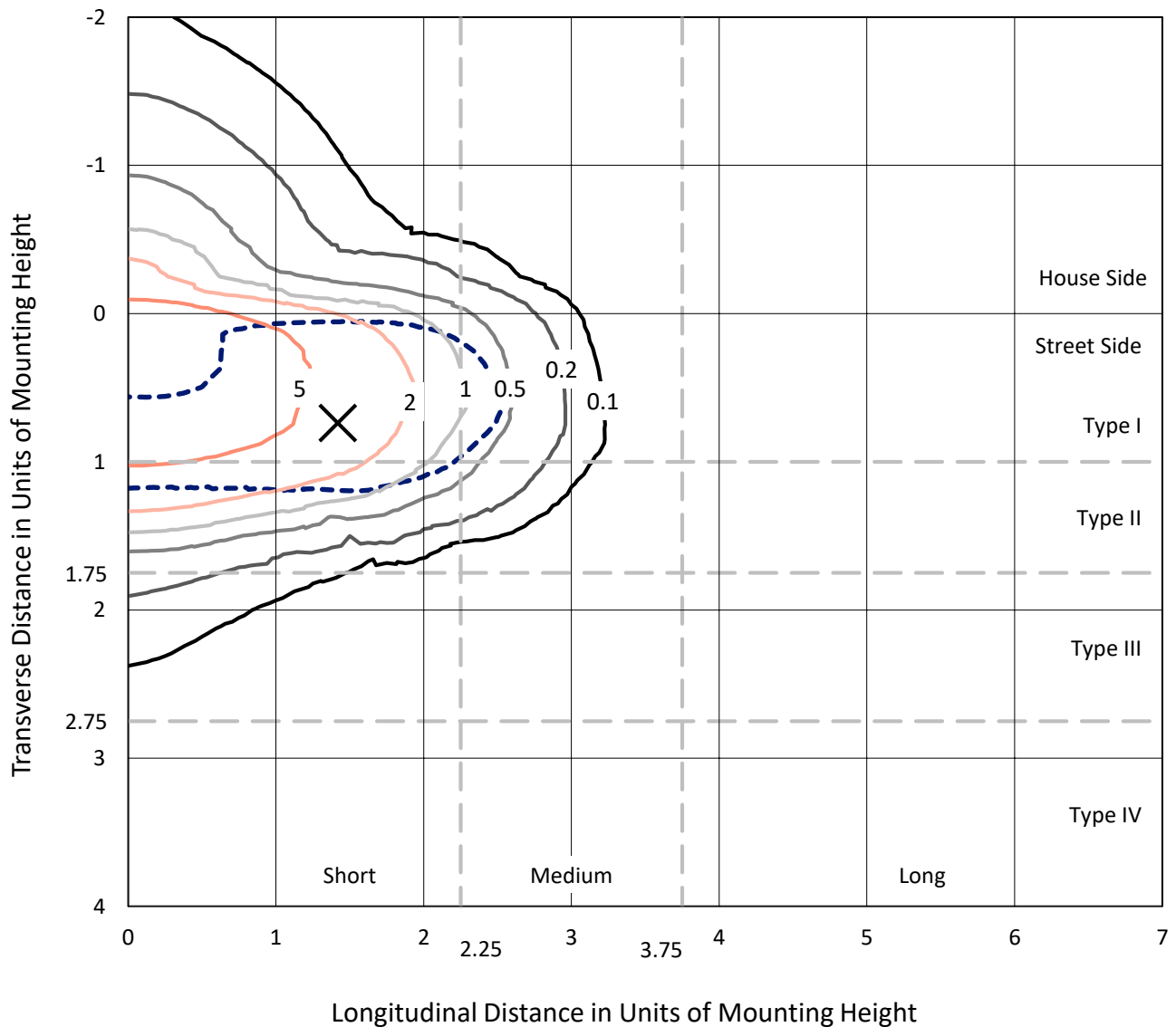
Input Watts (W): 111
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

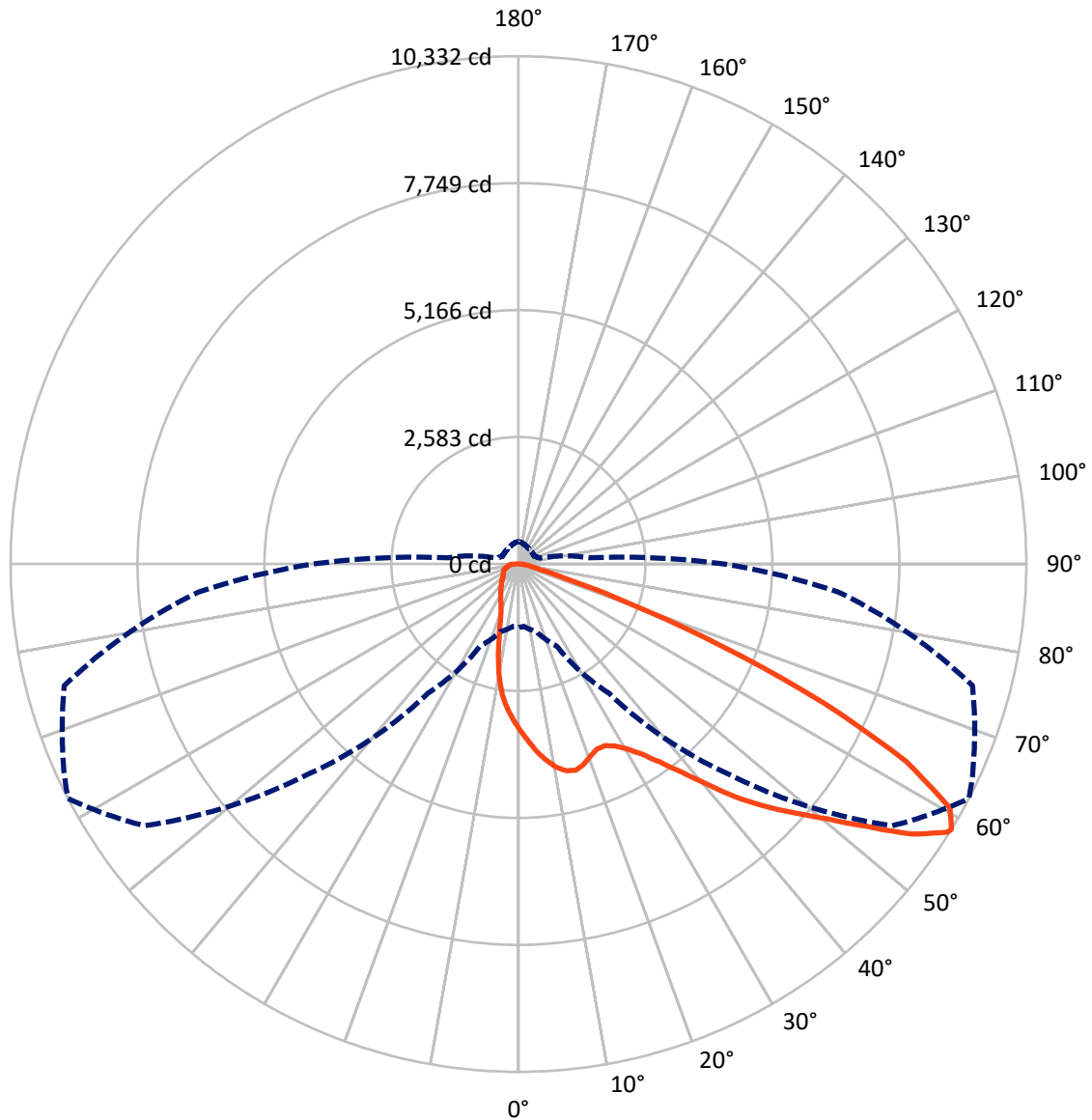
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9.9 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	1940.5	0.0	1940.5
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	10698.1	0.0	10698.1
	% Fixture	84.6	0.0	84.6
Total	Lumens	12638.6	0.0	12638.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.6	2.4
10°-20°	761.2	6.0
20°-30°	1233.6	9.8
30°-40°	1969.6	15.6
40°-50°	2864.8	22.7
50°-60°	2997.8	23.7
60°-70°	1827.6	14.5
70°-80°	511.1	4.0
80°-90°	171.3	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°	12638.6	100.0
0°-180°	12638.6	100.0

Coefficient of Utilization



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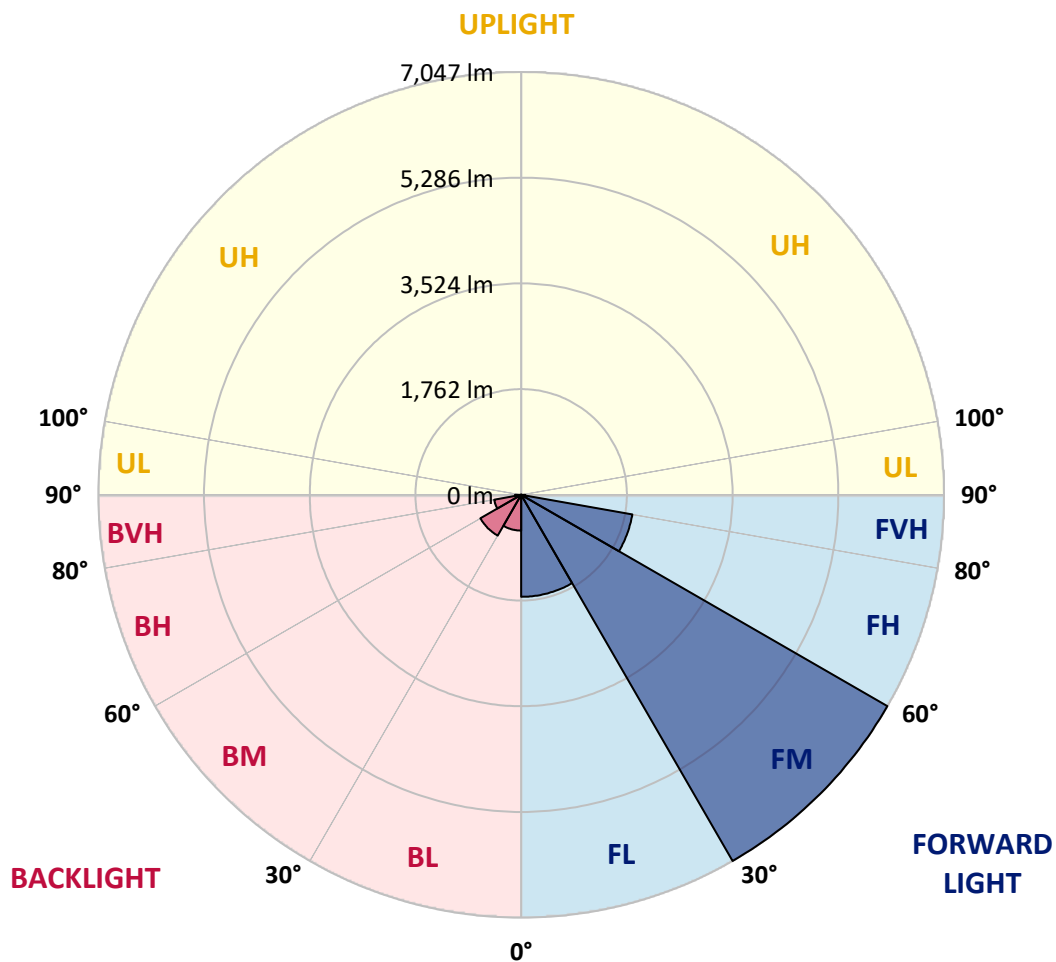
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1699.9	13.5			
FM	(30°-60°)	7047.4	55.8			
FH	(60°-80°)	1881.8	14.9			G2/5000
FVH	(80°-90°)	68.9	0.5			G1/100
BL	(0°-30°)	596.5	4.7	B2/1000		
BM	(30°-60°)	784.8	6.2	B1/1000		
BH	(60°-80°)	456.8	3.6	B1/500		G1/500
BVH	(80°-90°)	102.4	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°	3374.4	3374.4	3374.4	3374.4	3374.4	3374.4	3374.4	3374.4	3374.4	3374.4	3374.4
2.5°	3830.1	3827.8	3795.5	3774.1	3748.8	3690.4	3631.9	3588.5	3566.3	3481.8	3399.7
5°	4146.9	4137.4	4119.3	4096.4	4063.2	3989.7	3897.3	3817.6	3785.9	3635.9	3485.0
7.5°	3979.5	3994.5	4050.6	4113.8	4180.1	4184.8	4119.3	4024.5	3989.7	3789.1	3568.0
10°	3515.8	3509.4	3579.8	3703.0	3921.8	4138.2	4246.5	4199.8	4163.5	3934.5	3650.9
12.5°	3375.2	3373.6	3385.5	3417.1	3554.5	3851.5	4214.0	4315.2	4302.5	4088.4	3739.3
15°	3417.9	3419.4	3418.6	3422.6	3460.5	3601.9	4033.2	4353.9	4393.4	4240.9	3829.4
17.5°	3554.5	3549.0	3531.6	3512.6	3518.1	3568.8	3838.1	4287.5	4406.1	4376.8	3905.2
20°	3765.4	3765.4	3718.8	3665.8	3631.2	3642.2	3756.7	4173.7	4347.5	4492.1	3962.1
22.5°	4030.0	4034.0	3965.3	3868.9	3789.9	3759.9	3803.3	4089.2	4276.4	4598.8	4012.6
25°	4358.6	4357.9	4257.5	4119.3	3994.5	3922.6	3921.8	4093.2	4254.4	4723.6	4065.6
27.5°	4765.4	4728.3	4611.4	4414.6	4238.6	4128.7	4079.0	4192.8	4301.0	4876.8	4136.6
30°	5224.3	5186.5	5033.2	4780.5	4541.9	4381.5	4299.4	4364.9	4443.1	5071.9	4244.1
32.5°	5678.5	5687.2	5507.2	5222.0	4915.5	4689.6	4568.0	4608.2	4662.7	5310.4	4389.4
35°	6343.6	6342.8	6107.4	5751.2	5387.1	5074.2	4920.2	4941.6	4991.3	5646.9	4593.3
37.5°	6839.7	6831.8	6680.1	6364.9	5955.0	5579.8	5357.0	5360.2	5402.8	6069.5	4861.8
40°	6890.2	6888.7	6887.8	6842.8	6562.4	6208.5	5929.7	5872.0	5889.4	6518.1	5147.0
42.5°	6503.9	6561.6	6727.5	6981.8	7060.0	6874.4	6610.6	6481.8	6444.0	7033.2	5448.6
45°	5953.4	5982.6	6273.3	6845.2	7310.4	7500.0	7301.7	7030.0	6965.3	7533.9	5694.4
47.5°	5697.5	5684.8	5853.1	6476.3	7286.0	7997.6	8011.9	7566.4	7456.6	7966.0	5903.7
50°	5148.5	5131.9	5344.4	5933.6	7019.0	8244.9	8740.9	8150.9	7947.9	8376.7	6093.2
52.5°	4054.5	4038.7	4323.9	5082.9	6421.8	8152.5	9355.5	8868.1	8522.1	8772.5	6270.2
55°	2638.2	2639.8	2911.5	3694.3	5196.7	7613.7	9643.8	9696.7	9308.9	9168.3	6413.1
57.5°	1452.6	1439.2	1632.7	2113.7	3575.0	6390.2	9403.7	10293.9	10091.6	9507.9	6516.6
58°	1291.5	1275.7	1425.0	1839.7	3205.4	6045.0	9282.8	10331.8	10192.0	9564.0	6531.6
60°	920.2	893.3	870.4	1037.2	1846.7	4358.6	8477.1	10086.1	10221.2	9676.2	6517.4
62.5°	775.7	744.9	662.7	656.4	869.7	2131.9	6703.8	8857.8	9236.2	9417.9	6288.3
65°	720.4	689.6	581.3	542.7	590.0	920.2	4145.3	6839.7	7345.2	8519.7	5711.7
67.5°	680.9	644.6	528.5	477.9	487.3	550.6	1759.1	4473.2	5059.2	6643.8	4582.1
70°	645.4	605.1	486.6	428.1	420.2	418.6	687.2	2335.7	2900.5	4347.5	3069.5
72.5°	605.1	565.6	449.5	387.1	369.7	339.6	413.1	965.3	1323.1	2131.1	1406.8
75°	546.6	514.2	408.4	353.1	323.0	275.7	304.9	462.9	570.3	816.0	653.3
77.5°	481.1	455.0	366.5	324.7	284.4	225.2	233.0	313.6	352.3	459.7	378.4
80°	340.4	350.0	319.9	285.9	250.4	181.7	179.3	229.9	252.8	308.8	254.3
82.5°	234.6	241.7	260.6	225.9	202.2	141.4	132.0	159.6	171.4	186.4	123.3
85°	167.5	162.8	180.9	161.9	148.5	90.0	84.5	101.1	108.2	113.8	59.2
87.5°	101.9	101.1	104.2	83.7	77.4	45.8	41.8	48.2	51.4	49.7	28.4
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°	3374.4	3374.4	3374.4	3374.4	3374.4	3374.4	3374.4	3374.4	3374.4	3374.4	3374.4
2.5°	3368.9	3330.2	3245.6	3177.7	3104.2	3048.2	2992.1	2960.5	2925.7	2906.0	2903.6
5°	3406.0	3327.0	3146.9	2979.4	2807.3	2652.4	2500.8	2388.6	2297.0	2244.9	2241.7
7.5°	3447.0	3323.1	3045.0	2755.1	2448.6	2143.8	1874.5	1684.1	1561.6	1504.8	1500.8
10°	3478.6	3306.5	2921.0	2470.0	1984.2	1581.4	1336.5	1224.4	1187.2	1177.7	1176.2
12.5°	3516.6	3294.6	2764.6	2104.3	1516.6	1203.8	1129.5	1122.5	1130.4	1135.1	1135.9
15°	3552.1	3271.7	2553.7	1699.0	1187.2	1075.8	1077.4	1092.4	1108.3	1115.3	1116.1
17.5°	3568.8	3215.6	2276.5	1338.8	1038.7	1018.1	1036.4	1056.1	1070.3	1075.8	1075.8
20°	3568.8	3125.6	1955.0	1084.5	961.3	965.3	987.4	1002.4	1005.6	1000.8	998.4
22.5°	3553.7	3014.2	1642.1	946.3	898.2	913.1	930.5	920.2	883.1	854.7	849.2
25°	3540.3	2882.3	1341.2	861.7	842.8	862.6	855.5	785.1	728.2	699.1	694.3
27.5°	3518.1	2722.8	1090.1	792.3	789.1	804.9	734.6	666.7	638.2	622.5	619.3
30°	3512.6	2549.8	912.4	730.7	736.2	714.0	633.5	611.4	605.1	596.4	592.4
32.5°	3530.8	2376.8	801.0	680.1	685.6	613.0	582.2	585.3	584.5	573.5	569.5
35°	3580.5	2208.6	729.9	634.3	618.5	549.0	552.9	562.4	562.4	549.0	544.2
37.5°	3667.5	2052.1	684.9	595.6	541.0	515.8	526.1	538.7	538.7	529.3	525.3
40°	3759.9	1899.7	650.9	564.8	492.1	492.9	503.2	512.6	516.6	518.1	515.1
42.5°	3843.6	1741.7	614.5	531.6	469.9	475.5	480.3	487.3	503.9	515.1	513.4
45°	3892.5	1582.9	575.0	490.5	455.0	457.4	455.7	468.4	488.2	504.7	504.7
47.5°	3937.6	1452.6	542.7	449.5	440.0	440.0	435.3	447.8	466.1	485.8	487.3
50°	3980.3	1368.1	519.8	417.9	421.0	418.6	417.1	428.9	453.4	477.1	481.1
52.5°	4023.7	1339.7	499.2	395.0	401.3	398.1	399.7	416.2	444.0	468.4	472.4
55°	4084.5	1357.9	477.9	379.1	382.3	381.6	387.8	406.8	431.3	455.7	457.4
57.5°	4159.5	1424.2	459.7	367.3	364.2	368.9	379.1	397.3	421.0	450.2	452.7
58°	4174.6	1440.0	456.5	364.2	360.2	367.3	377.6	395.0	419.4	450.2	452.7
60°	4197.5	1496.1	448.7	357.8	346.8	359.4	372.0	389.4	416.2	454.2	458.9
62.5°	4086.9	1507.1	446.3	350.7	332.6	348.3	363.4	383.1	413.1	467.6	477.9
65°	3703.8	1393.4	429.7	338.9	320.7	339.6	355.5	378.4	422.6	507.9	512.6
67.5°	2973.1	1157.2	389.4	320.7	307.3	329.4	349.1	378.4	426.6	514.2	517.4
70°	2044.3	869.7	338.9	301.0	291.4	316.7	346.8	387.1	413.1	486.6	477.1
72.5°	1068.0	605.1	297.0	278.0	272.5	305.7	369.7	378.4	397.3	454.2	444.7
75°	537.9	411.5	261.5	252.0	251.1	301.8	413.9	364.2	380.7	427.3	447.8
77.5°	317.5	322.2	233.0	227.5	231.4	294.6	414.7	350.0	361.8	393.3	415.5
80°	217.2	266.2	210.9	209.3	212.5	271.0	382.3	332.6	339.6	372.0	395.8
82.5°	122.4	146.9	184.8	195.1	193.5	222.0	330.2	302.5	311.2	440.0	465.2
85°	59.2	88.5	154.8	182.5	165.1	147.7	268.5	268.5	271.0	315.2	319.2
87.5°	22.1	39.5	104.2	144.5	115.3	88.5	182.5	190.4	211.6	218.0	222.8
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)