

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: P271293

Luminaire Tested: **XNV2-AF-02-LED-U-AFL-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271293
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-7027
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10734.5 lumens
Efficiency: N/A
Efficacy: 96.7 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 - G1

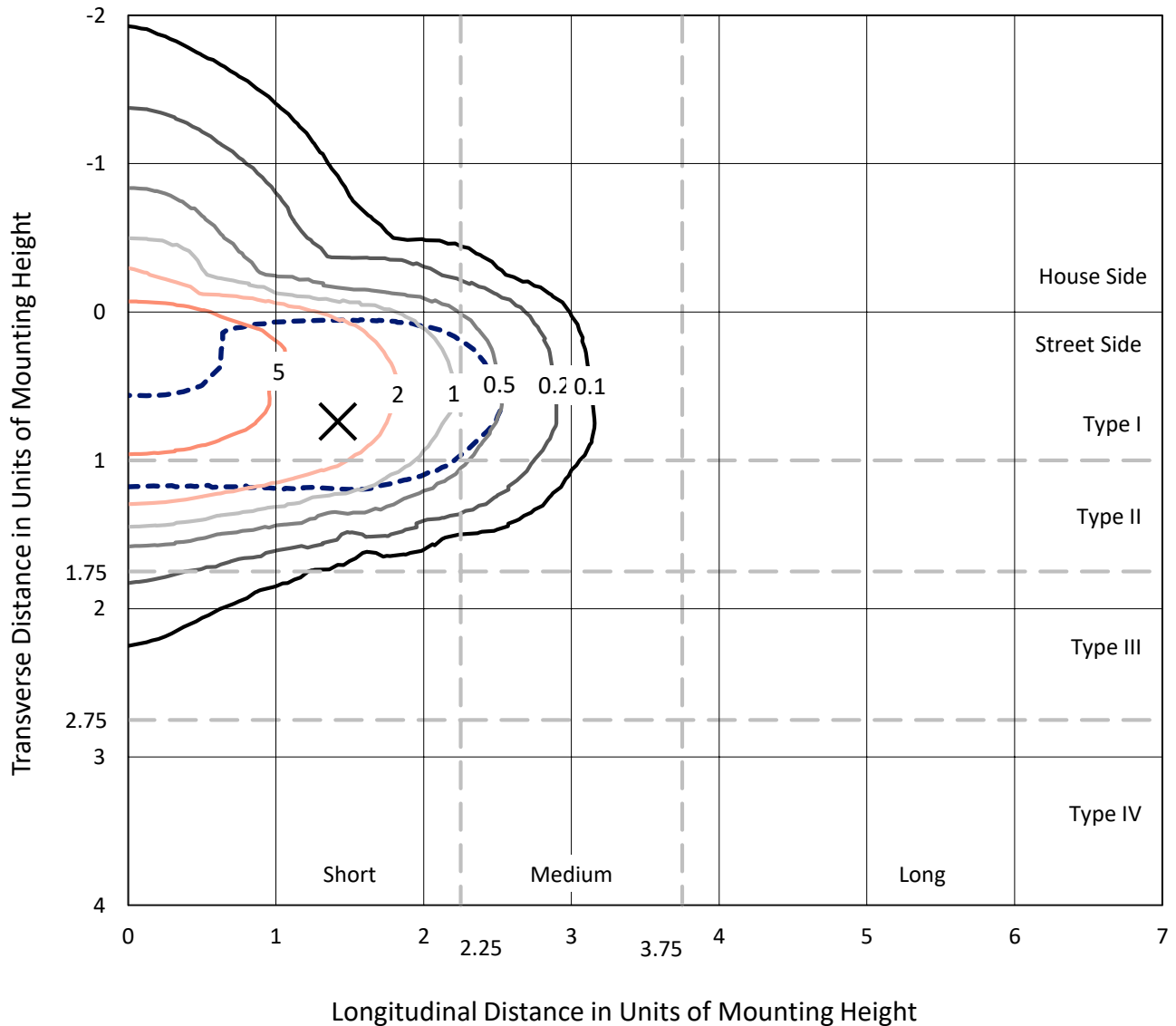
Input Watts (W): 111
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

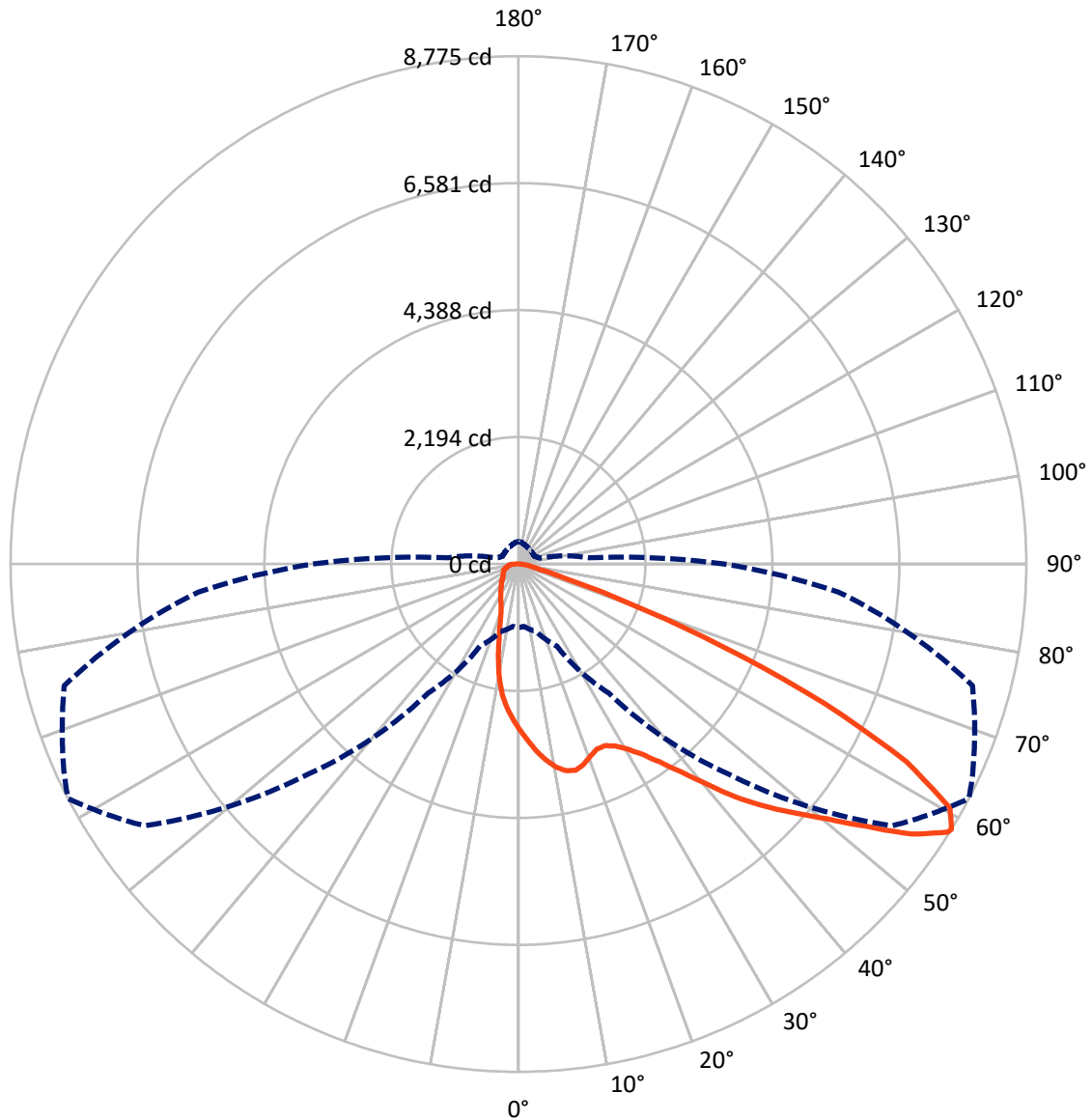
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.4 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	1648.1	0.0	1648.1
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	9086.3	0.0	9086.3
	% Fixture	84.6	0.0	84.6
Total	Lumens	10734.5	0.0	10734.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.2	2.4
10°-20°	646.5	6.0
20°-30°	1047.8	9.8
30°-40°	1672.8	15.6
40°-50°	2433.2	22.7
50°-60°	2546.1	23.7
60°-70°	1552.2	14.5
70°-80°	434.1	4.0
80°-90°	145.5	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°	10734.5	100.0
0°-180°	10734.5	100.0

Coefficient of Utilization



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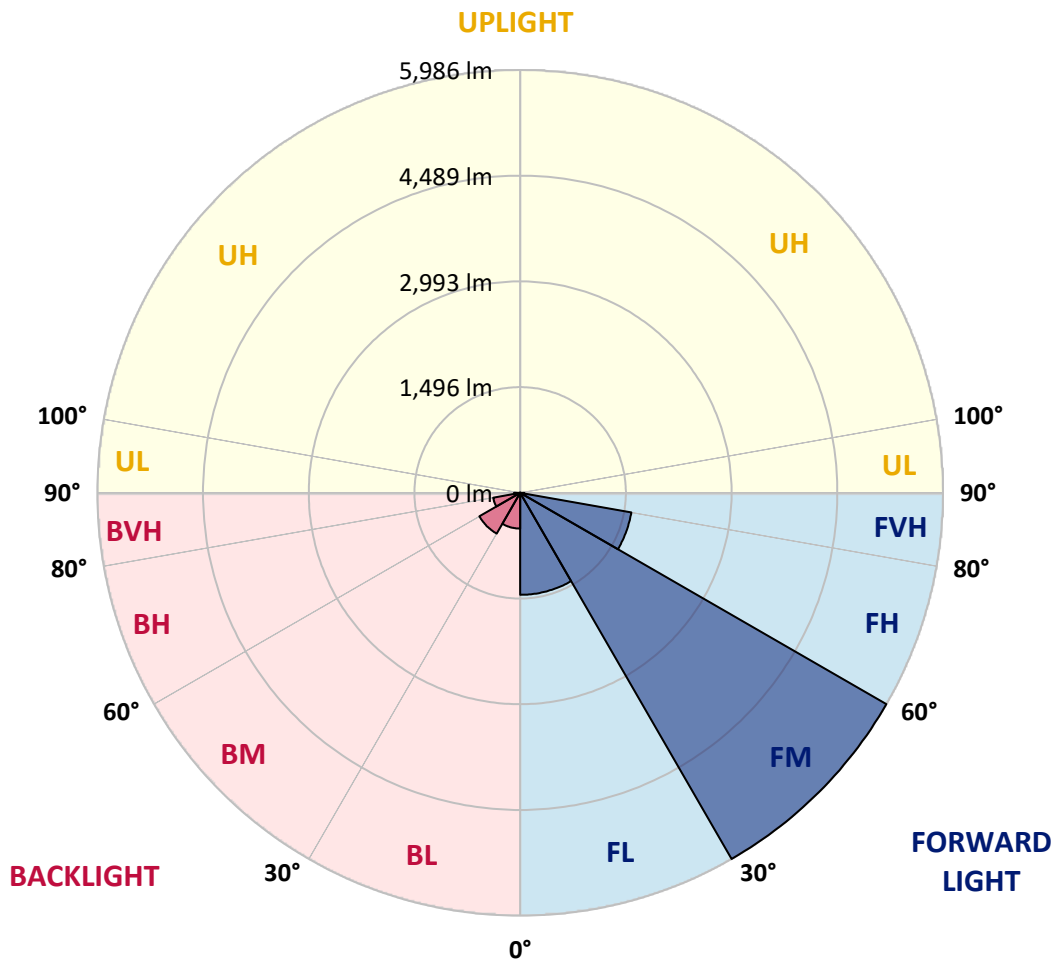
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1443.8	13.5			
FM	(30°-60°)	5985.7	55.8			
FH	(60°-80°)	1598.3	14.9			G1/1800
FVH	(80°-90°)	58.5	0.5			G1/100
BL	(0°-30°)	506.6	4.7	B2/1000		
BM	(30°-60°)	666.5	6.2	B1/1000		
BH	(60°-80°)	388.0	3.6	B1/500		G1/500
BVH	(80°-90°)	87.0	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	2866.0	2866.0	2866.0	2866.0	2866.0	2866.0	2866.0	2866.0	2866.0	2866.0	2866.0
2.5°	3253.1	3251.1	3223.6	3205.5	3184.0	3134.4	3084.7	3047.8	3029.1	2957.3	2887.5
5°	3522.2	3514.1	3498.7	3479.2	3451.1	3388.6	3310.2	3242.4	3215.6	3088.2	2959.9
7.5°	3380.0	3392.7	3440.2	3494.0	3550.3	3554.4	3498.7	3418.2	3388.6	3218.3	3030.4
10°	2986.1	2980.8	3040.5	3145.1	3330.9	3514.8	3606.7	3567.1	3536.3	3341.7	3100.8
12.5°	2866.8	2865.4	2875.5	2902.2	3019.1	3271.3	3579.1	3665.1	3654.3	3472.5	3176.0
15°	2903.0	2904.3	2903.6	2906.9	2939.2	3059.3	3425.5	3698.0	3731.5	3602.1	3252.5
17.5°	3019.1	3014.4	2999.5	2983.5	2988.1	3031.2	3259.8	3641.5	3742.2	3717.4	3316.8
20°	3198.1	3198.1	3158.5	3113.5	3084.2	3093.5	3190.7	3545.0	3692.6	3815.3	3365.2
22.5°	3422.9	3426.2	3367.8	3286.0	3218.9	3193.5	3230.3	3473.1	3632.1	3905.9	3408.1
25°	3701.9	3701.2	3616.0	3498.7	3392.7	3331.6	3330.9	3476.5	3613.4	4011.9	3453.1
27.5°	4047.5	4016.0	3916.6	3749.5	3600.0	3506.8	3464.5	3561.2	3653.0	4142.1	3513.5
30°	4437.3	4405.1	4274.9	4060.2	3857.6	3721.4	3651.6	3707.3	3773.7	4307.7	3604.7
32.5°	4823.0	4830.4	4677.5	4435.2	4175.0	3983.1	3879.7	3913.9	3960.3	4510.4	3728.1
35°	5387.9	5387.2	5187.4	4884.8	4575.4	4309.8	4178.9	4197.2	4239.3	4796.2	3901.2
37.5°	5809.2	5802.5	5673.6	5406.0	5057.8	4739.2	4549.9	4552.6	4588.9	5155.2	4129.2
40°	5852.2	5850.8	5850.1	5811.9	5573.8	5273.2	5036.3	4987.4	5002.1	5536.2	4371.5
42.5°	5524.0	5573.1	5713.9	5930.0	5996.4	5838.8	5614.6	5505.4	5473.2	5973.5	4627.8
45°	5056.5	5081.4	5328.1	5813.9	6209.1	6370.2	6201.7	5970.9	5915.9	6398.9	4836.5
47.5°	4839.1	4828.4	4971.3	5500.6	6188.2	6792.8	6804.8	6426.5	6333.2	6765.9	5014.2
50°	4372.9	4358.8	4539.2	5039.8	5961.5	7002.6	7424.0	6922.9	6750.5	7114.8	5175.2
52.5°	3443.7	3430.3	3672.5	4317.2	5454.2	6924.2	7946.0	7532.1	7238.3	7450.9	5325.5
55°	2240.7	2242.1	2472.9	3137.7	4413.7	6466.7	8190.8	8235.8	7906.4	7787.0	5447.0
57.5°	1233.7	1222.4	1386.8	1795.4	3036.5	5427.5	7986.9	8743.1	8571.3	8075.5	5534.8
58°	1096.9	1083.4	1210.2	1562.5	2722.5	5134.4	7884.2	8775.3	8656.4	8123.2	5547.6
60°	781.5	758.8	739.3	880.9	1568.5	3701.9	7199.9	8566.5	8681.3	8218.4	5535.4
62.5°	658.7	632.6	562.9	557.5	738.6	1810.8	5693.8	7523.3	7844.7	7999.0	5341.0
65°	611.8	585.6	493.8	460.9	501.2	781.5	3520.7	5809.2	6238.5	7236.1	4851.1
67.5°	578.2	547.4	448.9	405.9	413.8	467.6	1494.2	3799.2	4297.0	5642.9	3891.7
70°	548.1	513.9	413.3	363.6	356.8	355.5	583.7	1983.7	2463.5	3692.6	2607.2
72.5°	513.9	480.4	381.7	328.7	314.0	288.4	350.9	819.9	1123.7	1810.1	1194.8
75°	464.2	436.8	346.8	299.9	274.4	234.2	258.9	393.2	484.4	693.0	554.9
77.5°	408.5	386.5	311.4	275.7	241.6	191.2	197.8	266.3	299.2	390.5	321.4
80°	289.2	297.2	271.6	242.8	212.7	154.2	152.4	195.2	214.7	262.3	216.0
82.5°	199.2	205.4	221.4	191.9	171.8	120.2	112.1	135.6	145.5	158.3	104.7
85°	142.2	138.2	153.6	137.5	126.1	76.4	71.8	85.9	91.8	96.6	50.3
87.5°	86.5	85.9	88.6	71.1	65.8	38.8	35.6	41.0	43.6	42.3	24.2
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°	2866.0	2866.0	2866.0	2866.0	2866.0	2866.0	2866.0	2866.0	2866.0	2866.0	2866.0
2.5°	2861.3	2828.5	2756.7	2699.0	2636.5	2588.9	2541.3	2514.4	2485.0	2468.3	2466.1
5°	2892.8	2825.8	2672.7	2530.5	2384.3	2252.8	2124.0	2028.7	1950.9	1906.7	1904.0
7.5°	2927.8	2822.5	2586.3	2340.1	2079.8	1820.8	1592.1	1430.3	1326.3	1278.1	1274.7
10°	2954.5	2808.3	2480.9	2097.8	1685.3	1343.1	1135.2	1039.9	1008.3	1000.4	998.9
12.5°	2986.8	2798.3	2348.1	1787.3	1288.1	1022.5	959.4	953.3	960.1	964.2	964.7
15°	3017.0	2778.7	2169.0	1443.0	1008.3	913.8	915.2	927.8	941.2	947.4	948.0
17.5°	3031.2	2731.1	1933.5	1137.2	882.2	864.8	880.2	897.0	909.1	913.8	913.8
20°	3031.2	2654.8	1660.4	921.1	816.5	819.9	838.6	851.4	854.1	850.1	848.0
22.5°	3018.3	2560.1	1394.8	803.8	762.8	775.5	790.2	781.5	750.1	725.9	721.2
25°	3006.9	2448.2	1139.2	731.8	715.8	732.6	726.5	666.8	618.6	593.7	589.6
27.5°	2988.1	2312.5	925.9	672.9	670.2	683.6	624.0	566.2	542.0	528.7	526.0
30°	2983.5	2165.6	774.9	620.5	625.3	606.4	538.1	519.3	513.9	506.6	503.2
32.5°	2998.8	2018.8	680.2	577.6	582.3	520.6	494.4	497.1	496.5	487.2	483.6
35°	3041.1	1875.8	619.9	538.8	525.2	466.3	469.6	477.7	477.7	466.3	462.3
37.5°	3115.0	1743.0	581.7	505.8	459.6	438.2	446.7	457.5	457.5	449.5	446.2
40°	3193.5	1613.4	552.7	479.6	417.9	418.6	427.4	435.4	438.7	440.1	437.5
42.5°	3264.5	1479.2	521.9	451.5	399.1	403.9	407.9	413.8	428.0	437.5	436.0
45°	3306.1	1344.5	488.4	416.6	386.5	388.4	387.1	397.8	414.6	428.8	428.8
47.5°	3344.4	1233.7	460.9	381.7	373.6	373.6	369.7	380.4	395.9	412.6	413.8
50°	3380.6	1162.0	441.4	354.9	357.5	355.5	354.2	364.4	385.2	405.2	408.5
52.5°	3417.5	1137.9	424.0	335.4	340.7	338.1	339.5	353.6	377.1	397.8	401.3
55°	3469.2	1153.2	405.9	322.0	324.6	324.1	329.4	345.5	366.2	387.1	388.4
57.5°	3532.9	1209.6	390.5	311.9	309.2	313.2	322.0	337.5	357.5	382.4	384.5
58°	3545.6	1223.0	387.8	309.2	306.0	311.9	320.6	335.4	356.3	382.4	384.5
60°	3565.2	1270.7	381.2	303.8	294.6	305.2	316.1	330.8	353.6	385.7	389.8
62.5°	3471.2	1280.1	379.1	297.9	282.4	295.8	308.6	325.4	350.9	397.2	405.9
65°	3145.8	1183.4	364.9	287.7	272.4	288.4	301.9	321.4	359.0	431.4	435.4
67.5°	2525.2	982.8	330.8	272.4	261.0	279.7	296.5	321.4	362.2	436.8	439.5
70°	1736.2	738.6	287.7	255.6	247.6	269.0	294.6	328.7	350.9	413.3	405.2
72.5°	907.1	513.9	252.2	236.2	231.5	259.6	314.0	321.4	337.5	385.7	377.6
75°	456.9	349.5	222.2	214.1	213.3	256.2	351.5	309.2	323.4	362.9	380.4
77.5°	269.8	273.8	197.8	193.2	196.5	250.3	352.2	297.2	307.3	334.1	352.9
80°	184.5	226.2	179.1	177.8	180.5	230.1	324.6	282.4	288.4	316.1	336.1
82.5°	103.9	124.8	156.9	165.6	164.4	188.6	280.5	256.9	264.3	373.6	395.2
85°	50.3	75.2	131.5	155.0	140.2	125.5	228.1	228.1	230.1	267.6	271.1
87.5°	18.8	33.5	88.6	122.8	97.9	75.2	155.0	161.7	179.8	185.2	189.3
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)