

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: P198677

Luminaire Tested: **XNV2-AF-02-LED-U-AFL-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198677
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-800
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10211.1 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 85
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

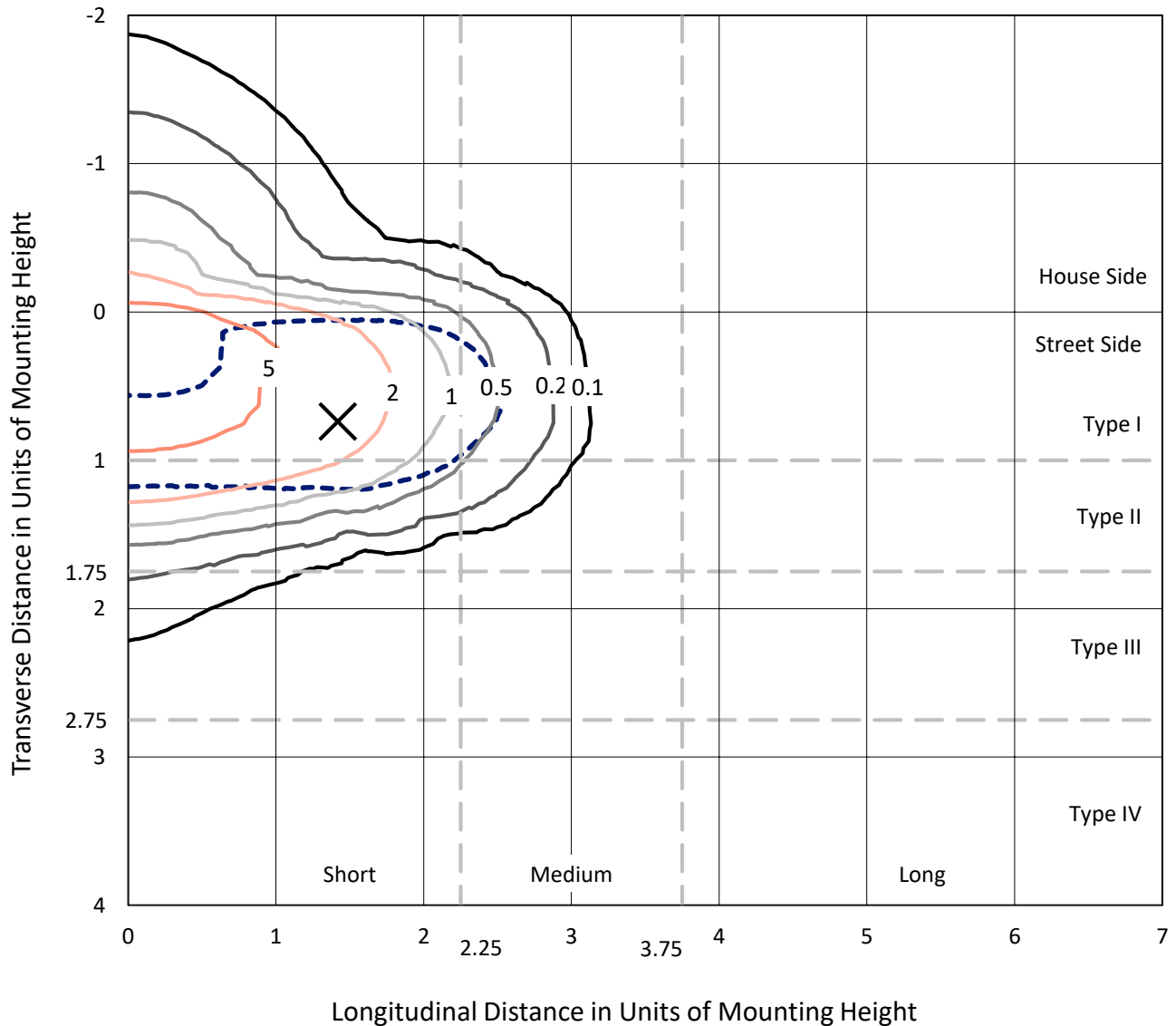


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Iso-Footcandle Lines of Horizontal Illumination

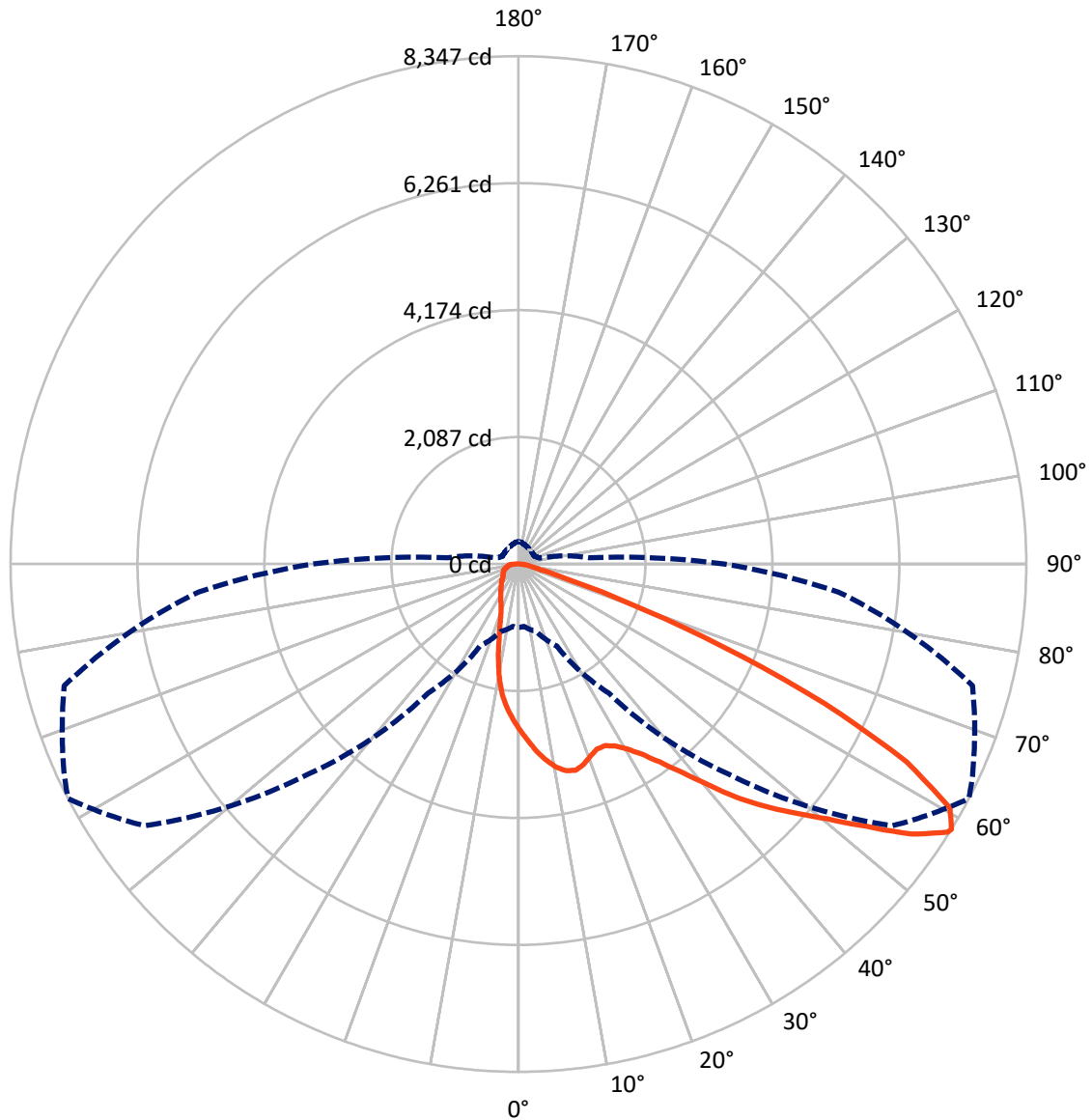
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8 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	1567.8	0.0	1567.8
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	8643.3	0.0	8643.3
	% Fixture	84.6	0.0	84.6
Total	Lumens	10211.1	0.0	10211.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.7	2.4
10°-20°	615.0	6.0
20°-30°	996.7	9.8
30°-40°	1591.3	15.6
40°-50°	2314.6	22.7
50°-60°	2422.0	23.7
60°-70°	1476.5	14.5
70°-80°	412.9	4.0
80°-90°	138.4	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°	10211.1	100.0
0°-180°	10211.1	100.0



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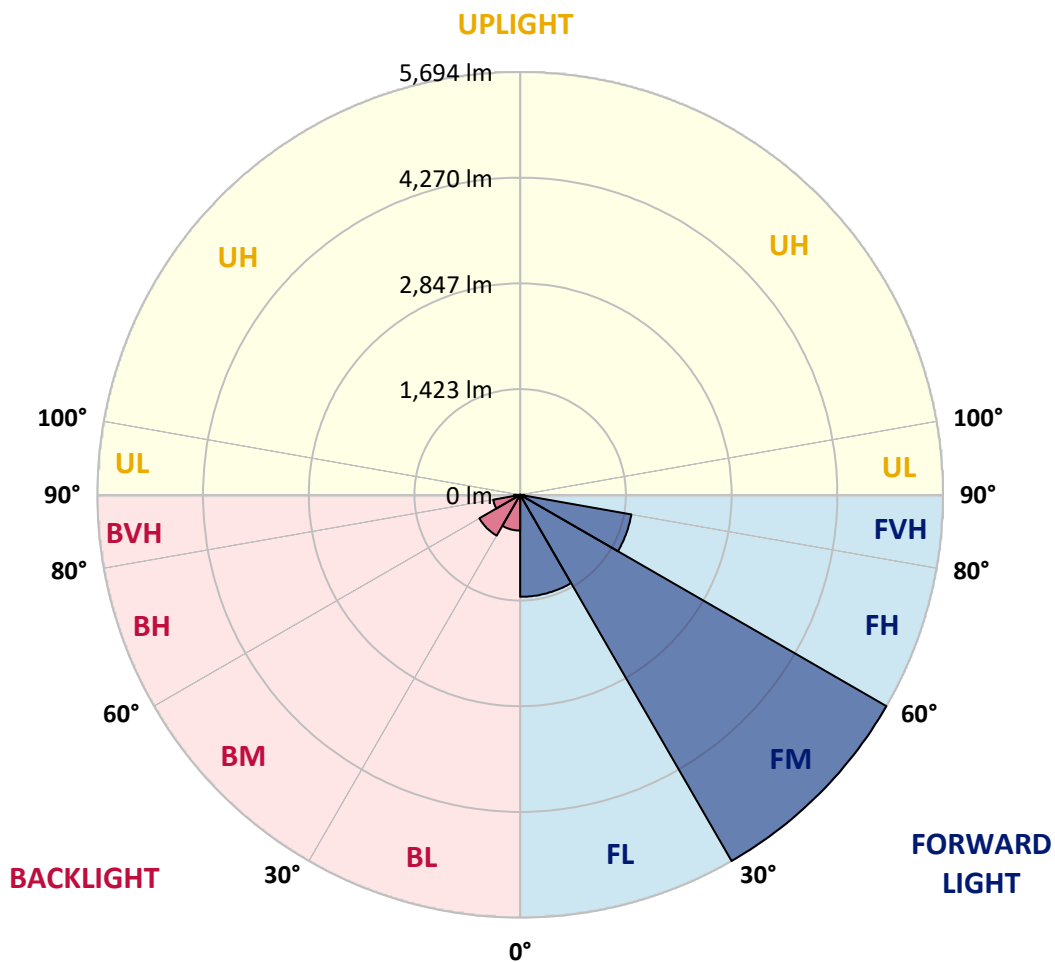
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1373.4	13.5			
FM	(30°-60°)	5693.8	55.8			
FH	(60°-80°)	1520.4	14.9			G1/1800
FVH	(80°-90°)	55.7	0.5			G1/100
BL	(0°-30°)	481.9	4.7	B1/500		
BM	(30°-60°)	634.0	6.2	B1/1000		
BH	(60°-80°)	369.1	3.6	B1/500		G1/500
BVH	(80°-90°)	82.7	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-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°	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3
2.5°	3094.5	3092.6	3066.4	3049.2	3028.8	2981.6	2934.3	2899.2	2881.3	2813.1	2746.7
5°	3350.5	3342.8	3328.1	3309.6	3282.8	3223.4	3148.7	3084.3	3058.8	2937.5	2815.7
7.5°	3215.1	3227.3	3272.6	3323.7	3377.3	3381.1	3328.1	3251.6	3223.4	3061.4	2882.7
10°	2840.5	2835.4	2892.2	2991.8	3168.6	3343.4	3430.9	3393.2	3363.9	3178.7	2949.7
12.5°	2727.0	2725.7	2735.3	2760.7	2871.8	3111.7	3404.7	3486.3	3476.2	3303.2	3021.2
15°	2761.4	2762.7	2762.1	2765.2	2795.8	2910.1	3258.5	3517.6	3549.5	3426.4	3093.9
17.5°	2871.8	2867.3	2853.3	2838.0	2842.5	2883.3	3100.9	3464.0	3559.8	3536.1	3155.2
20°	3042.2	3042.2	3004.5	2961.7	2933.7	2942.6	3035.2	3372.2	3512.5	3629.3	3201.1
22.5°	3256.0	3259.2	3203.7	3125.8	3062.0	3037.8	3072.8	3303.8	3455.1	3715.5	3241.9
25°	3521.5	3520.8	3439.8	3328.1	3227.3	3169.2	3168.6	3307.0	3437.2	3816.3	3284.7
27.5°	3850.1	3820.1	3725.7	3566.8	3424.4	3335.7	3295.5	3387.4	3474.9	3940.1	3342.2
30°	4220.9	4190.3	4066.4	3862.3	3669.5	3539.9	3473.6	3526.5	3589.7	4097.7	3428.9
32.5°	4587.8	4594.9	4449.3	4219.0	3971.4	3788.9	3690.6	3723.1	3767.1	4290.5	3546.4
35°	5125.2	5124.6	4934.4	4646.5	4352.3	4099.7	3975.2	3992.5	4032.7	4562.4	3711.0
37.5°	5526.0	5519.6	5397.1	5142.5	4811.2	4508.0	4328.1	4330.7	4365.1	4903.7	3928.0
40°	5566.8	5565.6	5565.0	5528.5	5302.0	5016.0	4790.8	4744.2	4758.3	5266.3	4158.4
42.5°	5254.8	5301.3	5435.3	5640.9	5704.1	5554.1	5340.9	5236.9	5206.2	5682.3	4402.2
45°	4809.9	4833.5	5068.4	5530.5	5906.3	6059.4	5899.4	5679.8	5627.5	6087.0	4600.6
47.5°	4603.2	4592.9	4728.9	5232.4	5886.6	6461.6	6473.0	6113.2	6024.4	6436.0	4769.7
50°	4159.6	4146.2	4317.9	4794.0	5670.8	6661.3	7062.0	6585.3	6421.4	6767.8	4923.0
52.5°	3275.8	3263.0	3493.4	4106.6	5188.4	6586.7	7558.6	7164.8	6885.3	7087.6	5065.9
55°	2131.5	2132.8	2352.3	2984.8	4198.6	6151.4	7791.5	7834.3	7520.9	7407.3	5181.3
57.5°	1173.6	1162.8	1319.1	1707.7	2888.4	5162.8	7597.5	8316.7	8153.3	7681.7	5264.9
58°	1043.4	1030.6	1151.2	1486.3	2589.7	4884.0	7499.9	8347.4	8234.4	7727.1	5277.1
60°	743.5	721.8	703.3	837.9	1492.1	3521.5	6849.0	8148.9	8258.0	7817.7	5265.6
62.5°	626.7	601.8	535.4	530.3	702.7	1722.4	5416.2	7156.6	7462.2	7609.0	5080.5
65°	582.1	557.1	469.7	438.4	476.7	743.5	3349.1	5526.0	5934.4	6883.4	4614.6
67.5°	550.1	520.8	427.0	386.1	393.7	444.8	1421.2	3614.0	4087.5	5367.7	3702.1
70°	521.4	488.9	393.1	345.9	339.5	338.2	555.3	1887.1	2343.4	3512.5	2479.9
72.5°	488.9	457.0	363.1	312.7	298.7	274.5	333.8	779.9	1069.0	1721.8	1136.6
75°	441.6	415.4	329.9	285.3	261.1	222.7	246.3	374.0	460.7	659.2	527.7
77.5°	388.6	367.5	296.1	262.3	229.8	181.9	188.2	253.4	284.6	371.4	305.7
80°	275.1	282.7	258.5	231.0	202.3	146.8	144.8	185.7	204.2	249.5	205.5
82.5°	189.6	195.3	210.6	182.5	163.4	114.3	106.6	128.9	138.5	150.6	99.5
85°	135.3	131.4	146.2	130.8	120.0	72.7	68.3	81.7	87.5	91.9	47.9
87.5°	82.3	81.7	84.2	67.6	62.5	37.0	33.9	39.0	41.5	40.2	23.0
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°	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3
2.5°	2721.9	2690.6	2622.2	2567.4	2508.1	2462.8	2417.4	2391.9	2363.8	2347.9	2345.9
5°	2751.8	2688.0	2542.5	2407.2	2268.1	2143.0	2020.4	1929.9	1855.8	1813.7	1811.1
7.5°	2785.0	2684.8	2460.2	2225.9	1978.4	1732.1	1514.4	1360.6	1261.7	1215.8	1212.5
10°	2810.6	2671.4	2359.9	1995.6	1603.1	1277.7	1079.8	989.2	959.2	951.5	950.2
12.5°	2841.1	2661.8	2233.6	1700.1	1225.3	972.6	912.6	906.8	913.2	917.1	917.7
15°	2869.9	2643.3	2063.2	1372.7	959.2	869.2	870.4	882.6	895.4	901.1	901.7
17.5°	2883.3	2598.0	1839.3	1081.7	839.2	822.7	837.3	853.2	864.7	869.2	869.2
20°	2883.3	2525.3	1579.5	876.3	776.6	779.9	797.7	809.9	812.4	808.5	806.7
22.5°	2871.1	2435.2	1326.8	764.6	725.6	737.8	751.8	743.5	713.5	690.5	686.0
25°	2860.3	2328.7	1083.6	696.2	681.0	696.9	691.1	634.3	588.4	564.8	561.0
27.5°	2842.5	2199.8	880.7	640.1	637.5	650.3	593.5	538.6	515.7	502.9	500.3
30°	2838.0	2060.0	737.1	590.3	594.7	576.9	511.8	494.0	488.9	481.8	478.6
32.5°	2852.7	1920.3	647.1	549.4	553.9	495.2	470.4	472.9	472.3	463.3	460.1
35°	2892.9	1784.3	589.6	512.5	499.7	443.6	446.7	454.4	454.4	443.6	439.7
37.5°	2963.1	1658.0	553.3	481.2	437.1	416.8	425.0	435.3	435.3	427.6	424.4
40°	3037.8	1534.8	525.9	456.3	397.6	398.2	406.5	414.2	417.4	418.7	416.1
42.5°	3105.4	1407.2	496.5	429.5	379.7	384.2	388.0	393.7	407.1	416.1	414.8
45°	3145.0	1278.9	464.6	396.3	367.5	369.5	368.3	378.4	394.3	407.7	407.7
47.5°	3181.3	1173.6	438.4	363.1	355.5	355.5	351.6	361.8	376.5	392.5	393.7
50°	3215.7	1105.3	419.9	337.6	340.1	338.2	337.0	346.6	366.3	385.4	388.6
52.5°	3250.8	1082.4	403.3	319.1	324.2	321.6	322.9	336.3	358.6	378.4	381.7
55°	3300.0	1097.0	386.1	306.4	308.8	308.2	313.3	328.7	348.4	368.3	369.5
57.5°	3360.6	1150.6	371.4	296.8	294.2	298.0	306.4	321.0	340.1	363.8	365.7
58°	3372.8	1163.4	368.9	294.2	291.0	296.8	305.0	319.1	338.9	363.8	365.7
60°	3391.3	1208.7	362.5	289.1	280.2	290.4	300.5	314.7	336.3	366.9	370.8
62.5°	3301.9	1217.6	360.6	283.4	268.6	281.4	293.6	309.5	333.8	377.8	386.1
65°	2992.4	1125.8	347.2	273.7	259.1	274.5	287.1	305.7	341.5	410.3	414.2
67.5°	2402.1	935.0	314.7	259.1	248.3	266.1	282.0	305.7	344.6	415.4	418.0
70°	1651.6	702.7	273.7	243.2	235.5	255.9	280.2	312.7	333.8	393.1	385.4
72.5°	862.9	488.9	240.0	224.6	220.1	246.9	298.7	305.7	321.0	366.9	359.3
75°	434.5	332.5	211.2	203.6	203.0	243.8	334.4	294.2	307.6	345.2	361.8
77.5°	256.6	260.3	188.2	183.8	187.0	238.0	335.0	282.7	292.3	317.8	335.7
80°	175.5	215.0	170.4	169.1	171.7	218.9	308.8	268.6	274.5	300.5	319.8
82.5°	98.9	118.7	149.4	157.6	156.3	179.3	266.8	244.4	251.4	355.5	375.9
85°	47.9	71.5	125.1	147.4	133.4	119.4	217.0	217.0	218.9	254.6	257.8
87.5°	17.9	31.9	84.2	116.8	93.2	71.5	147.4	153.9	171.0	176.2	179.9
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)