

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: P198669

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198669
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24283)
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-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8365.7 lumens
Efficiency: N/A
Efficacy: 98.4 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

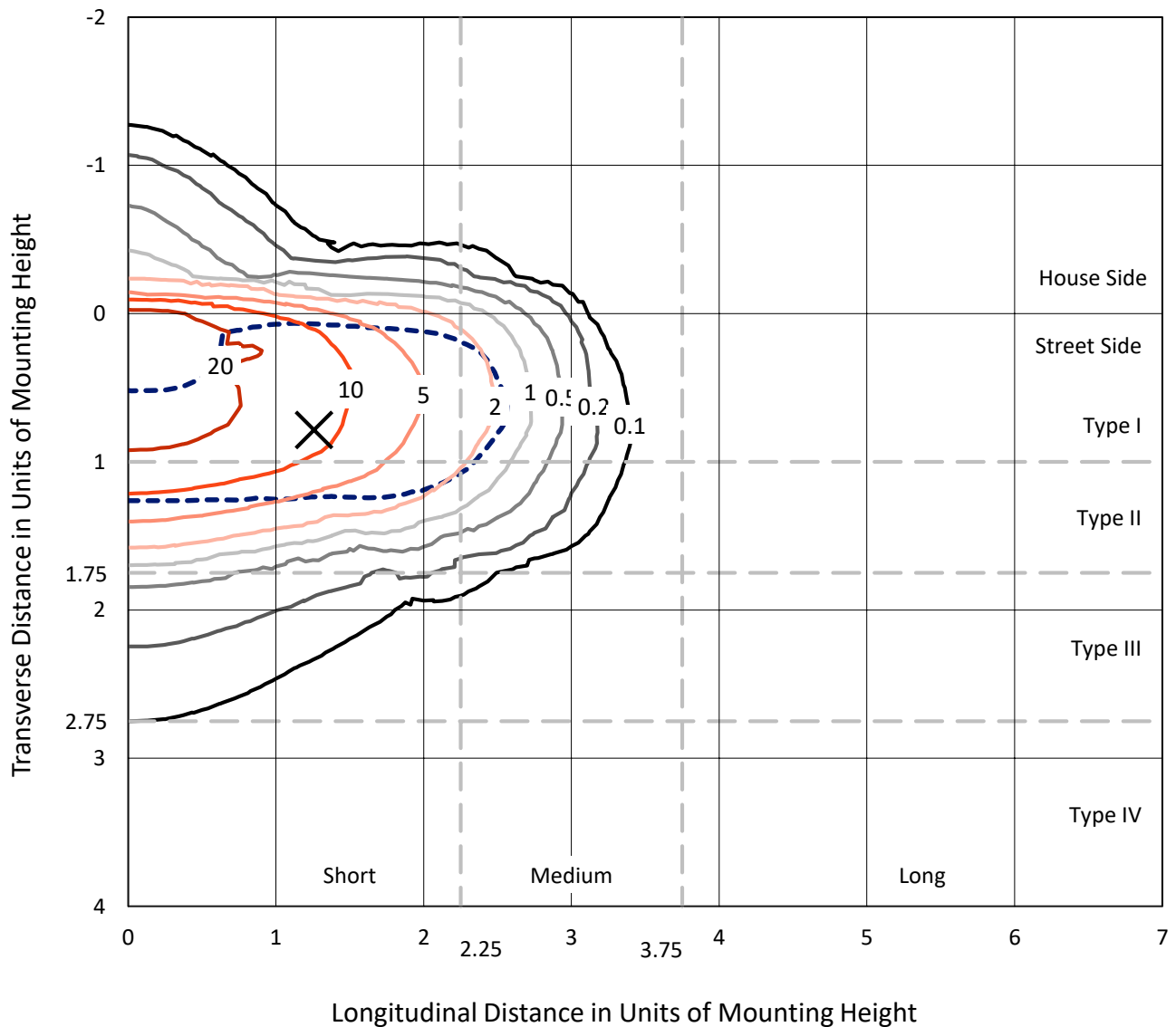
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

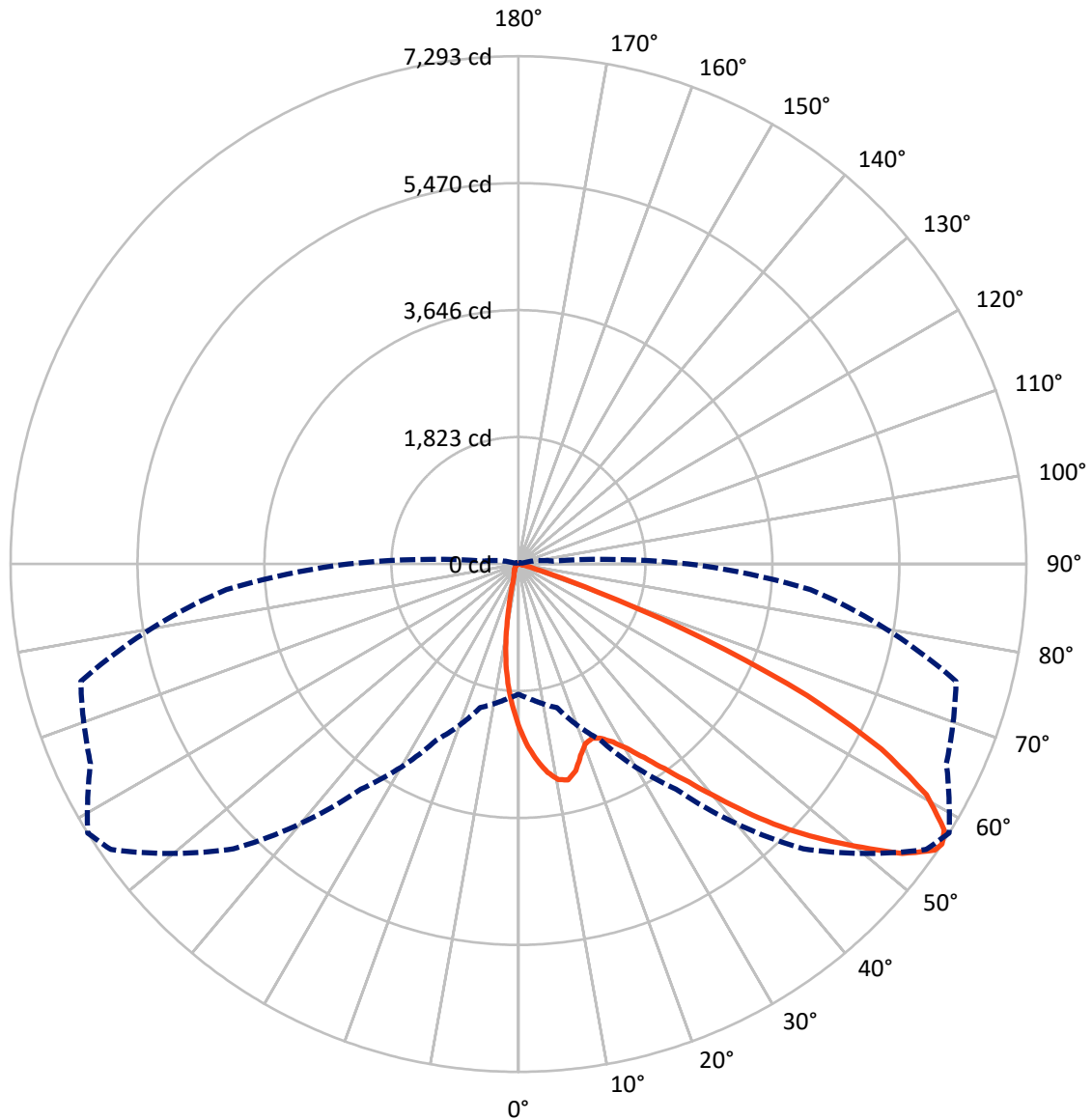
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 29.4 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 56-Deg Vertical

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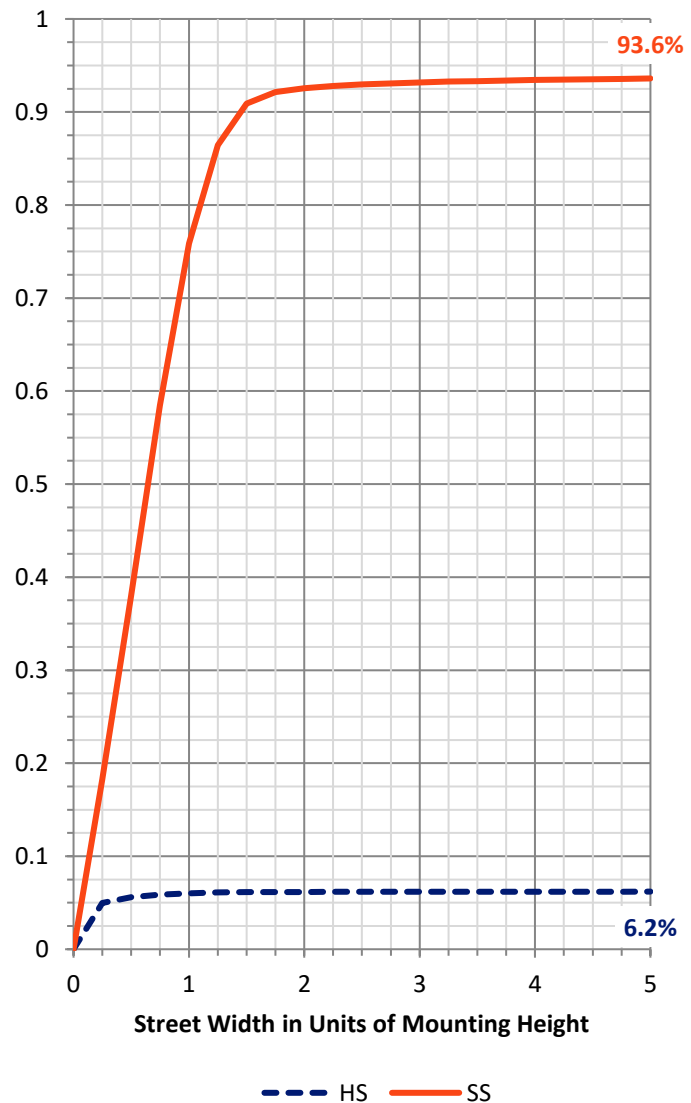
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	522.2	0.0	522.2
	% Fixture	6.2	0.0	6.2
Street Side	Lumens	7843.5	0.0	7843.5
	% Fixture	93.8	0.0	93.8
Total	Lumens	8365.7	0.0	8365.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.1	2.4
10°-20°	470.2	5.6
20°-30°	791.1	9.5
30°-40°	1354.7	16.2
40°-50°	2044.2	24.4
50°-60°	2124.9	25.4
60°-70°	1192.9	14.3
70°-80°	163.5	2.0
80°-90°	22.1	0.3
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°	8365.7	100.0
0°-180°	8365.7	100.0

Coefficient of Utilization



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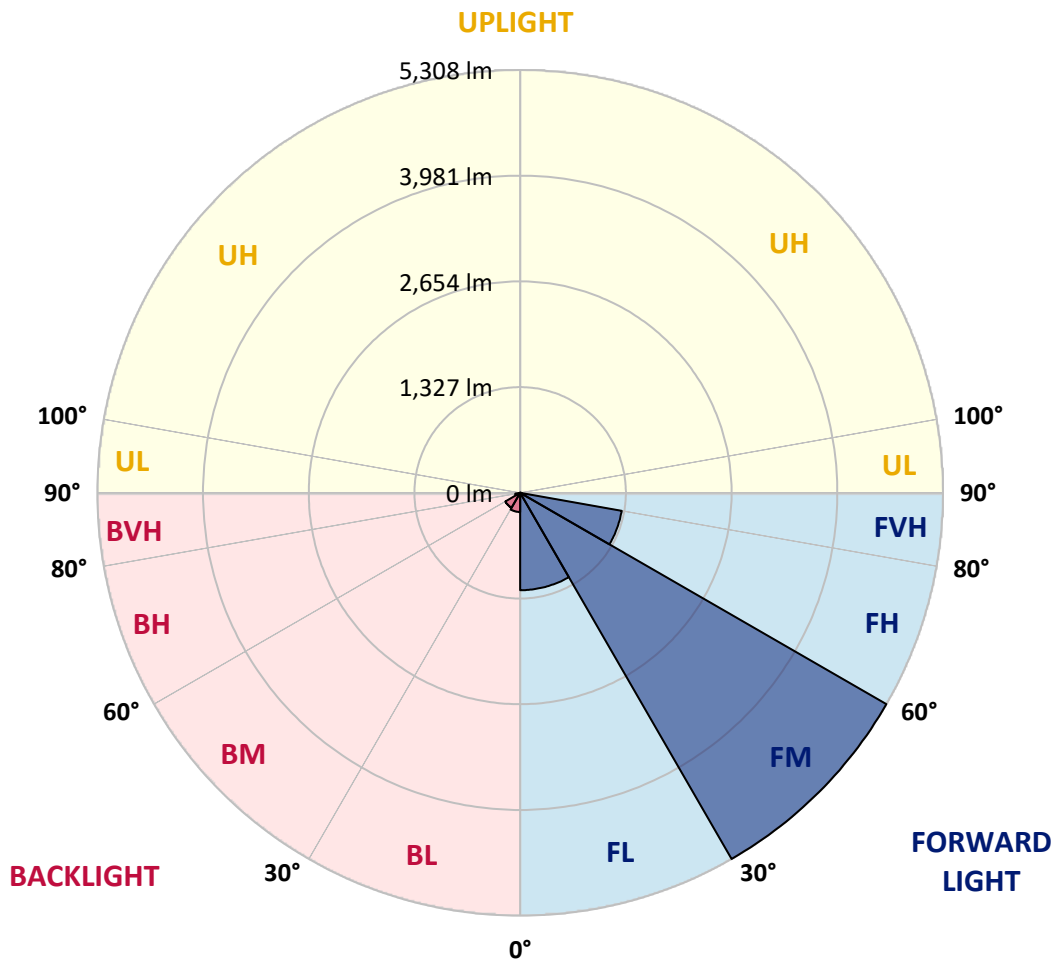
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1222.4	14.6			
FM	(30°-60°)	5307.5	63.4			
FH	(60°-80°)	1294.4	15.5			G1/1800
FVH	(80°-90°)	19.1	0.2			G1/100
BL	(0°-30°)	240.9	2.9	B1/500		
BM	(30°-60°)	216.3	2.6	B0/220		
BH	(60°-80°)	61.9	0.7	B0/110		G0/110
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: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5
2.5°	2849.8	2832.6	2814.8	2781.5	2750.9	2703.7	2638.6	2622.6	2571.6	2487.3	2408.7
5°	3095.6	3092.4	3080.2	3053.4	3020.3	2962.8	2889.4	2840.2	2761.1	2628.4	2477.1
7.5°	2950.0	2976.9	3020.9	3083.5	3125.5	3119.8	3063.6	3020.9	2942.4	2761.1	2544.1
10°	2486.7	2491.8	2552.4	2683.9	2892.0	3085.9	3159.4	3147.9	3075.8	2877.3	2602.8
12.5°	2323.2	2326.5	2340.5	2382.7	2517.9	2788.6	3121.1	3181.1	3175.3	2988.3	2665.4
15°	2336.0	2338.0	2341.7	2355.1	2393.5	2529.5	2927.1	3079.6	3239.2	3093.6	2726.7
17.5°	2436.9	2435.6	2423.5	2410.7	2422.9	2467.5	2729.2	2890.0	3225.8	3182.4	2777.1
20°	2633.5	2639.8	2599.0	2542.2	2512.8	2514.7	2631.5	2752.1	3150.5	3251.2	2814.8
22.5°	2909.8	2914.3	2847.3	2749.0	2662.8	2619.4	2652.0	2715.8	3063.6	3315.1	2845.3
25°	3239.8	3239.8	3146.0	3006.2	2872.9	2777.7	2749.6	2773.8	3030.5	3387.2	2876.0
27.5°	3596.0	3608.8	3486.2	3303.0	3126.9	2987.7	2899.7	2895.2	3056.0	3477.8	2910.5
30°	3983.4	3994.8	3849.4	3625.3	3416.6	3238.6	3103.2	3073.9	3153.7	3599.8	2960.9
32.5°	4368.9	4378.4	4217.6	3989.1	3745.9	3536.5	3358.6	3311.9	3329.2	3777.9	3034.9
35°	4859.1	4861.0	4657.4	4385.5	4125.7	3880.0	3654.7	3608.8	3589.5	4002.5	3141.5
37.5°	5249.1	5233.7	5104.8	4847.6	4549.5	4292.9	4028.1	3968.0	3922.1	4318.5	3306.8
40°	5340.9	5340.9	5321.8	5244.6	5007.8	4760.8	4504.2	4414.9	4313.4	4690.5	3529.0
42.5°	5101.6	5116.9	5243.3	5411.2	5413.0	5254.8	5004.0	4928.7	4750.0	5114.3	3771.5
45°	4566.1	4570.5	4873.7	5326.9	5634.5	5725.1	5540.1	5436.1	5188.4	5554.7	3993.6
47.5°	4373.3	4387.4	4516.3	5070.4	5651.2	6106.2	6054.5	5911.5	5594.3	5956.8	4201.1
50°	4077.2	4094.5	4252.1	4692.5	5501.8	6350.7	6546.6	6393.4	5963.9	6292.0	4303.8
52.5°	3368.8	3395.6	3618.3	4192.8	5128.5	6360.9	6997.2	6905.3	6342.4	6471.3	4291.7
55°	2318.1	2338.0	2597.7	3273.0	4375.3	6048.8	7191.2	7254.5	6680.0	6511.5	4233.0
56°	1870.1	1944.1	2134.4	2788.6	3946.3	5783.3	7146.5	7292.7	6780.2	6505.1	4207.4
57.5°	1236.3	1250.4	1457.8	2020.7	3169.0	5206.9	6944.9	7211.1	6909.1	6472.6	4188.9
60°	581.4	587.8	662.5	932.5	1715.0	3794.4	6289.4	6731.1	6956.4	6404.3	4188.3
62.5°	379.1	380.4	389.3	444.9	701.4	2066.7	5214.0	5849.6	6565.1	6396.6	4176.1
65°	312.1	315.3	304.4	311.5	367.0	779.3	3677.6	4560.3	5646.7	6216.7	4039.5
67.5°	275.1	275.7	261.1	252.8	268.7	342.1	1852.9	2876.6	4223.4	5282.2	3327.2
70°	250.8	250.2	233.6	214.4	215.1	227.2	603.7	1194.8	2336.6	3136.4	1910.4
72.5°	222.8	224.0	214.4	187.6	178.7	160.8	227.2	322.3	795.2	1007.2	503.6
75°	195.3	192.7	183.2	165.9	149.4	107.8	114.3	137.2	207.5	205.5	108.5
77.5°	148.1	145.6	150.0	141.7	116.8	75.3	62.5	71.5	93.8	87.5	44.1
80°	112.9	111.7	102.1	121.2	106.6	56.8	42.8	44.1	51.0	46.5	21.7
82.5°	81.7	81.0	77.2	74.7	67.6	41.5	32.5	34.5	38.3	32.5	16.0
85°	31.3	31.3	60.7	51.0	46.5	28.1	23.0	24.9	29.4	23.6	10.8
87.5°	5.1	5.1	40.8	33.9	21.1	14.0	14.7	16.0	17.2	14.0	8.3
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°	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5	2368.5
2.5°	2362.2	2319.4	2225.6	2135.0	2055.8	1969.1	1925.0	1873.9	1854.8	1816.5	1820.3
5°	2386.4	2297.1	2108.8	1910.4	1728.4	1543.3	1411.9	1288.0	1219.1	1150.8	1150.8
7.5°	2411.3	2274.7	1983.7	1666.5	1360.1	1042.9	818.3	638.2	538.1	471.1	469.1
10°	2428.6	2246.0	1841.4	1383.7	931.9	537.5	324.3	255.3	230.4	219.5	218.9
12.5°	2450.9	2217.3	1679.3	1050.6	517.6	255.3	202.3	191.5	187.0	184.4	184.4
15°	2470.0	2176.4	1482.7	706.6	271.9	191.5	174.2	170.4	169.8	169.1	169.8
17.5°	2474.5	2118.4	1247.2	413.6	197.2	167.3	159.6	156.4	156.4	155.7	155.7
20°	2464.3	2041.8	986.7	255.3	170.4	153.9	145.6	141.7	141.1	141.1	141.1
22.5°	2443.2	1944.1	729.6	193.4	155.1	141.7	130.8	127.1	127.1	127.7	128.3
25°	2417.1	1828.6	501.0	166.5	143.6	128.9	118.0	114.3	115.5	116.8	117.4
27.5°	2383.9	1690.7	328.1	144.2	128.3	116.2	106.6	104.0	106.6	109.1	110.4
30°	2350.7	1539.4	222.1	125.1	111.1	102.1	96.4	95.7	99.5	105.4	106.0
32.5°	2329.1	1384.4	167.9	112.3	97.7	90.0	87.5	88.7	94.4	100.9	102.1
35°	2327.1	1233.2	143.0	102.1	88.7	81.7	80.4	84.3	90.6	95.7	97.0
37.5°	2357.1	1091.4	129.6	94.4	81.7	74.7	72.7	79.8	85.5	90.6	91.9
40°	2417.7	964.4	120.6	87.5	75.9	67.6	66.4	72.1	77.8	83.6	85.5
42.5°	2493.6	845.7	110.4	80.4	69.6	60.0	58.7	63.2	68.9	77.2	78.5
45°	2559.4	735.3	99.5	72.7	62.5	51.7	51.0	56.2	60.7	68.3	69.6
47.5°	2615.0	643.3	89.4	64.4	53.6	45.9	45.3	47.9	50.4	57.5	58.7
50°	2585.6	565.5	79.2	53.0	43.4	39.6	39.0	39.0	42.1	49.1	50.4
52.5°	2513.5	517.0	69.6	44.1	35.7	33.9	31.9	32.5	35.7	39.0	39.6
55°	2455.4	494.0	61.3	39.0	30.0	28.1	26.2	25.6	26.2	24.9	23.6
56°	2441.4	491.4	59.3	37.6	28.7	26.2	23.6	22.3	21.7	19.1	18.5
57.5°	2434.9	491.4	56.2	35.1	26.8	23.6	20.5	17.9	15.3	13.4	13.4
60°	2429.8	494.7	52.4	30.6	23.0	19.1	14.7	10.8	8.9	8.9	8.9
62.5°	2419.0	493.4	47.9	25.6	19.7	14.7	8.9	7.1	6.3	7.1	7.7
65°	2297.1	458.3	42.1	20.5	15.3	10.2	5.1	5.1	5.7	7.1	7.7
67.5°	1850.9	347.2	34.5	16.0	10.8	7.7	4.5	4.5	5.7	7.1	7.7
70°	1016.7	183.2	29.4	11.5	8.3	6.3	4.5	3.8	5.7	7.1	7.7
72.5°	248.3	76.6	26.8	8.9	7.7	5.7	3.8	3.8	5.7	7.1	7.7
75°	61.3	57.5	21.7	7.1	6.3	5.1	3.8	3.8	5.7	7.1	7.7
77.5°	28.7	75.9	14.7	6.3	5.7	4.5	3.8	3.8	5.7	7.1	7.1
80°	17.2	57.5	8.9	5.7	5.1	4.5	3.8	3.8	5.7	7.1	7.7
82.5°	10.2	16.6	6.3	5.7	5.1	3.8	3.8	3.8	5.7	7.1	7.7
85°	8.9	8.3	6.3	5.7	5.1	4.5	3.8	3.8	6.3	7.7	7.7
87.5°	7.1	6.3	5.7	5.1	5.1	4.5	3.8	3.8	5.7	7.1	7.7
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)