

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: P198711

Luminaire Tested: **XNV2-AF-02-LED-U-SL3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198711
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24263)
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-SL3-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10471.9 lumens
Efficiency: N/A
Efficacy: 94.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 111
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

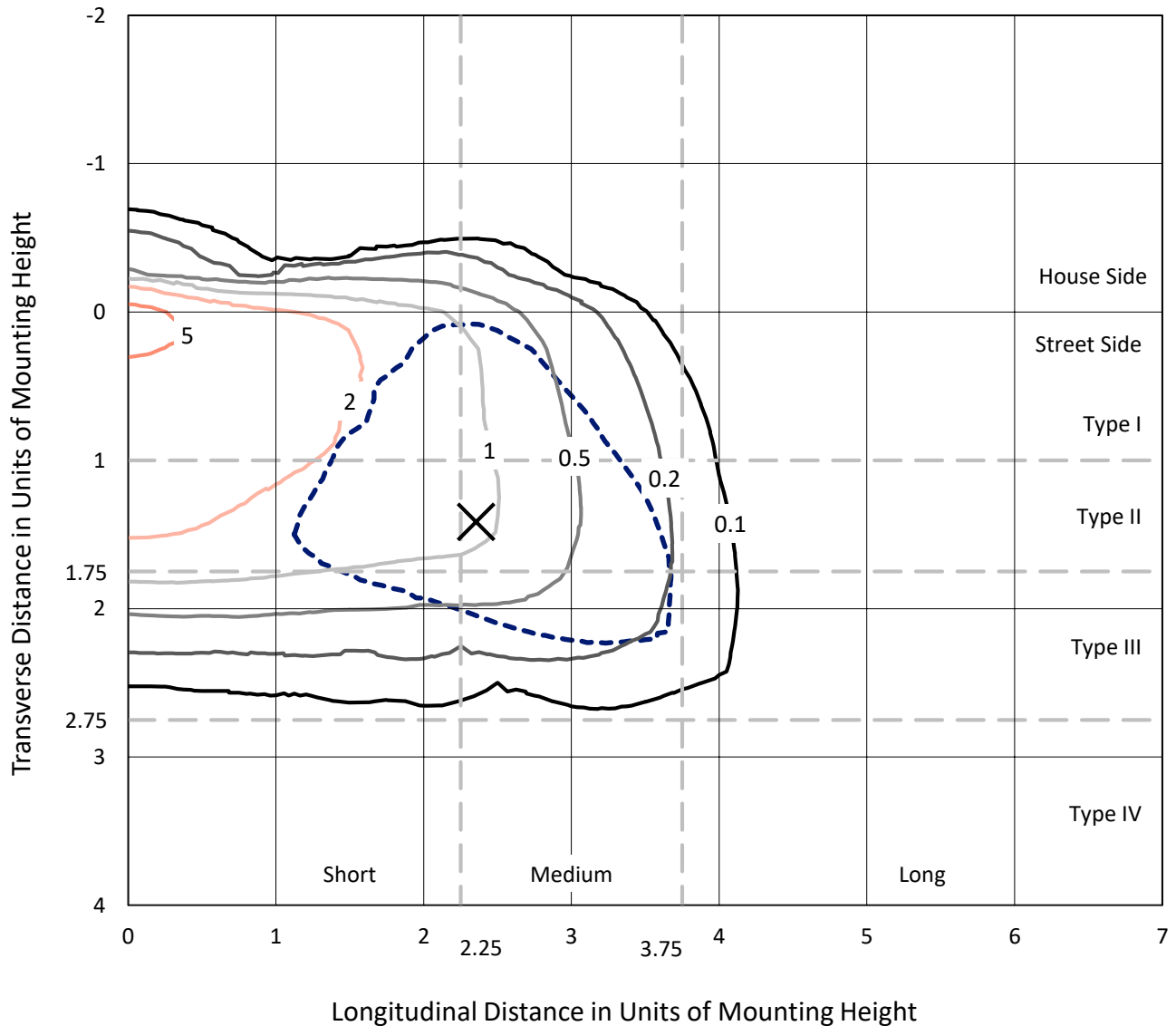


REPORT NUMBER: P198711

CATALOG NUMBER: XNV2-AF-02-LED-U-SL3-HSS

Iso-Footcandle Lines of Horizontal Illumination

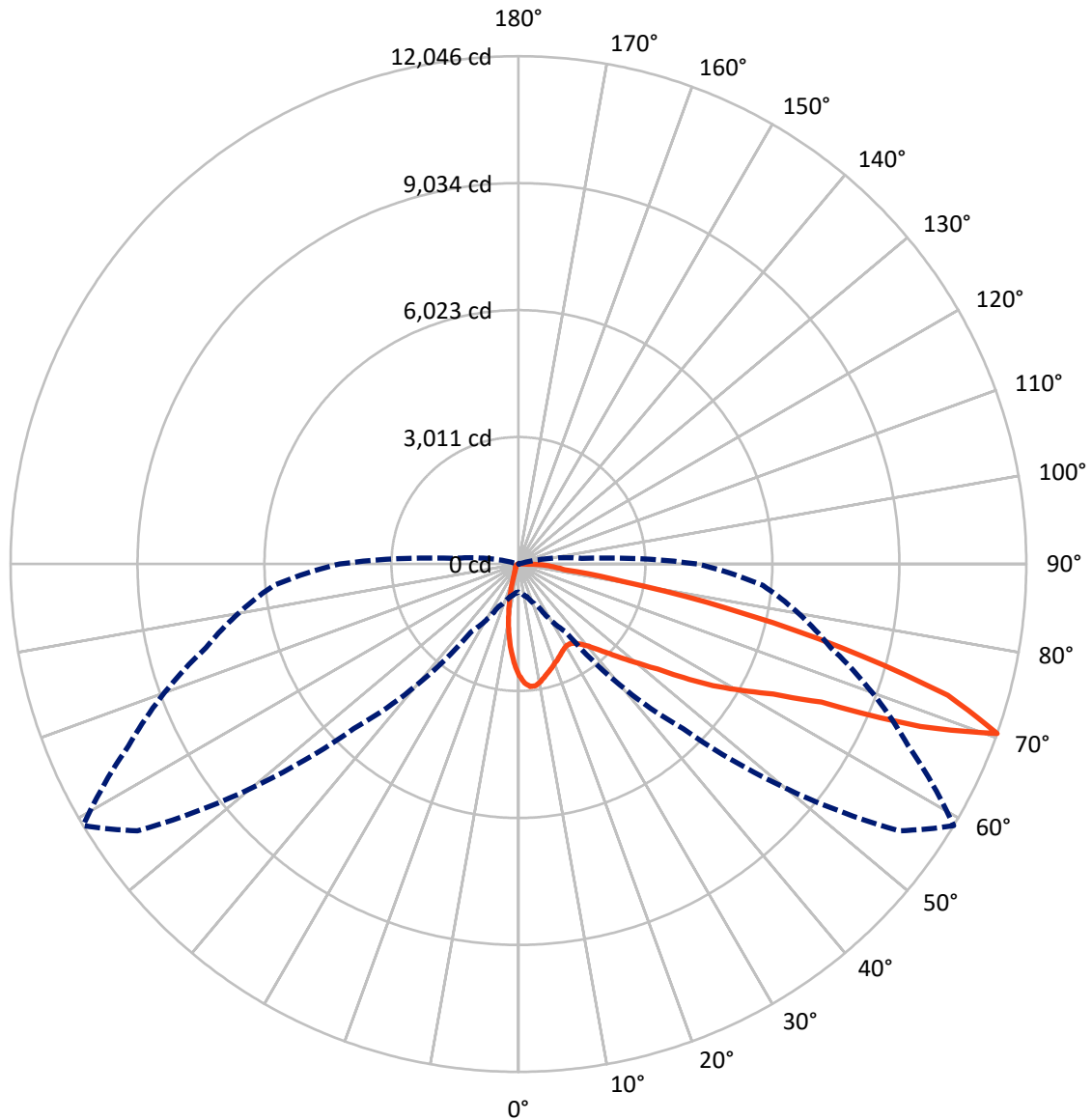
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P198711
CATALOG NUMBER: XNV2-AF-02-LED-U-SL3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	805.0	0.0	805.0
	% Fixture	7.7	0.0	7.7
Street Side	Lumens	9666.9	0.0	9666.9
	% Fixture	92.3	0.0	92.3
Total	Lumens	10471.9	0.0	10471.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.7	2.1
10°-20°	456.7	4.4
20°-30°	618.2	5.9
30°-40°	892.2	8.5
40°-50°	1481.7	14.1
50°-60°	2266.5	21.6
60°-70°	2819.0	26.9
70°-80°	1558.3	14.9
80°-90°	161.6	1.5
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°	10471.9	100.0
0°-180°	10471.9	100.0

Coefficient of Utilization



REPORT NUMBER: P198711

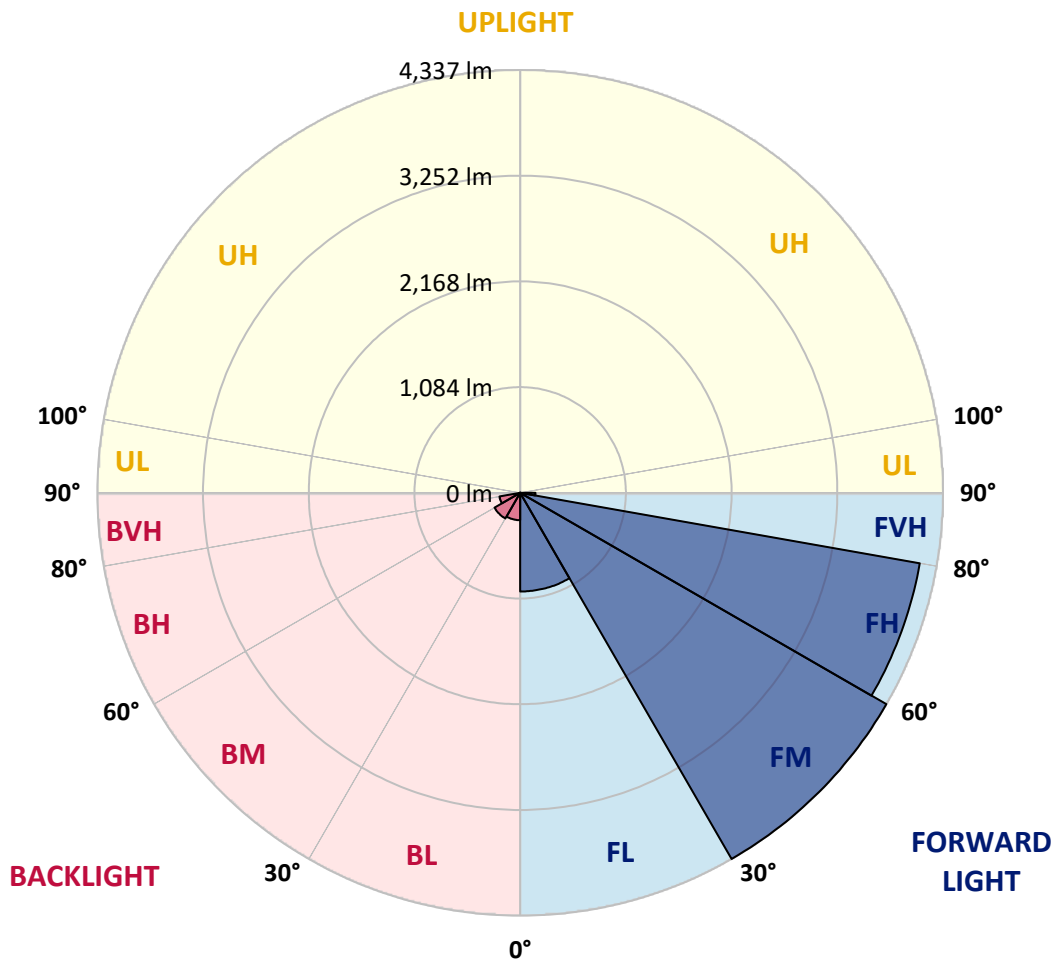
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1012.1	9.7			
FM	(30°-60°)	4336.5	41.4			
FH	(60°-80°)	4161.3	39.7			G2/5000
FVH	(80°-90°)	156.9	1.5			G2/225
BL	(0°-30°)	280.5	2.7	B1/500		
BM	(30°-60°)	303.9	2.9	B1/1000		
BH	(60°-80°)	216.0	2.1	B1/500		G1/500
BVH	(80°-90°)	4.7	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-G2

Type III Medium





REPORT NUMBER: P198711

CATALOG NUMBER: XNV2-AF-02-LED-U-SL3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	2648.0	2648.0	2648.0	2648.0	2648.0	2648.0	2648.0	2648.0	2648.0	2648.0	2648.0
2.5°	2993.2	2988.4	2968.7	2964.7	2942.6	2898.4	2847.1	2826.5	2784.7	2718.3	2644.8
5°	3043.0	3045.3	3047.0	3038.3	3035.1	2998.7	2941.8	2917.4	2861.3	2752.2	2617.9
7.5°	2856.5	2862.8	2882.6	2891.3	2929.2	2943.4	2931.6	2915.8	2871.5	2742.7	2554.0
10°	2659.9	2671.6	2693.0	2707.2	2753.8	2791.7	2839.9	2843.9	2834.4	2711.1	2482.1
12.5°	2490.8	2501.8	2525.6	2554.0	2601.4	2650.4	2722.3	2747.5	2779.2	2690.7	2430.7
15°	2345.4	2348.6	2371.5	2407.0	2469.4	2536.6	2621.9	2659.1	2720.6	2682.7	2391.2
17.5°	2218.3	2219.0	2234.0	2266.4	2342.3	2430.7	2530.3	2579.3	2657.4	2671.6	2356.5
20°	2134.5	2133.7	2134.5	2151.9	2219.0	2324.0	2445.0	2496.3	2596.7	2658.2	2321.0
22.5°	2106.1	2102.1	2084.0	2077.6	2120.3	2212.7	2357.3	2424.4	2542.1	2654.3	2294.9
25°	2140.8	2138.5	2099.7	2063.4	2067.4	2125.0	2268.0	2350.1	2499.5	2668.5	2288.5
27.5°	2252.9	2248.2	2189.0	2117.9	2072.9	2083.1	2201.6	2287.7	2465.5	2703.2	2297.2
30°	2399.9	2400.8	2337.5	2251.4	2145.5	2087.1	2166.1	2247.4	2442.6	2755.4	2316.2
32.5°	2563.4	2562.7	2517.6	2418.1	2283.0	2159.8	2181.9	2250.6	2445.8	2832.0	2352.5
35°	2732.5	2723.8	2708.8	2621.1	2463.2	2287.0	2253.8	2304.3	2478.9	2933.1	2414.2
37.5°	2927.6	2924.5	2939.4	2847.1	2685.9	2474.2	2380.2	2414.2	2562.7	3082.5	2513.7
40°	3238.0	3220.7	3227.8	3102.2	2937.1	2726.2	2557.2	2565.9	2696.2	3280.0	2670.9
42.5°	3829.7	3759.4	3627.6	3392.1	3213.6	3005.8	2788.6	2773.6	2884.9	3519.4	2877.9
45°	4536.8	4456.2	4123.6	3712.1	3490.1	3306.0	3074.6	3034.3	3117.2	3804.5	3144.9
47.5°	5126.9	5040.0	4599.2	4046.2	3771.3	3615.7	3391.4	3343.9	3395.3	4135.5	3465.6
50°	5328.3	5280.2	4893.1	4324.3	4054.9	3963.3	3788.7	3709.7	3722.3	4492.6	3840.1
52.5°	5235.9	5219.3	4960.2	4514.7	4317.2	4347.2	4224.0	4141.0	4126.8	4882.9	4253.9
55°	5040.8	5032.9	4906.5	4620.6	4548.7	4698.7	4834.6	4762.8	4628.4	5297.6	4596.0
57.5°	4761.9	4791.9	4882.9	4824.3	4833.0	5070.1	5401.8	5438.9	5238.3	5627.8	4849.6
60°	4017.0	4097.5	4513.9	5043.1	5448.4	5687.8	6009.3	6078.8	5754.9	5853.6	5142.7
62.5°	2969.5	3084.8	3678.1	4650.5	5787.3	6862.5	6817.5	6786.7	6247.9	6156.2	5675.9
65°	1744.2	1879.4	2380.9	3633.8	5276.2	7617.7	8326.3	7899.7	6999.1	6785.0	6525.2
67.5°	869.0	869.7	1096.5	1918.0	3899.3	7090.8	10528.7	10282.3	8596.5	7711.7	6860.1
70°	668.3	686.5	811.3	1114.6	1971.7	5522.7	11033.5	12045.5	10201.7	7670.6	5820.5
72.5°	566.4	578.3	722.0	970.1	1474.1	3031.9	9551.5	10647.2	9734.8	6480.9	4290.4
75°	407.6	417.1	639.0	880.0	1357.1	1504.1	6552.0	7896.6	7304.1	4558.9	2361.2
77.5°	101.1	100.4	222.8	714.1	1214.1	1252.9	3759.4	5063.7	4190.8	1866.7	606.7
80°	45.0	43.5	50.5	150.1	1129.6	1182.6	1653.4	2557.2	1607.6	302.6	185.7
82.5°	31.6	30.0	31.6	55.3	377.6	1097.2	999.3	1108.4	588.5	103.5	79.0
85°	10.2	9.5	17.4	46.6	105.9	632.8	974.9	827.9	437.6	44.2	52.9
87.5°	1.5	1.5	6.3	25.3	30.8	210.9	571.9	573.6	196.7	26.1	23.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P198711

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2648.0	2648.0	2648.0	2648.0	2648.0	2648.0	2648.0	2648.0	2648.0	2648.0	2648.0
2.5°	2607.7	2561.1	2495.5	2429.9	2370.7	2309.8	2260.9	2238.0	2227.7	2213.5	2182.7
5°	2547.7	2463.2	2319.3	2178.0	2046.0	1919.7	1811.4	1749.8	1683.5	1680.3	1647.9
7.5°	2451.3	2331.2	2104.5	1884.9	1683.5	1490.6	1324.8	1217.3	1143.9	1098.0	1066.4
10°	2343.9	2189.8	1889.6	1580.8	1306.6	1049.0	835.8	696.7	612.2	569.6	545.0
12.5°	2258.6	2065.0	1677.9	1289.2	945.6	650.2	451.8	350.8	305.8	288.4	280.4
15°	2185.0	1950.5	1479.6	1028.6	631.2	373.7	261.5	228.3	221.2	221.2	220.4
17.5°	2110.8	1839.9	1286.9	772.6	397.3	244.9	206.2	201.4	202.2	204.6	204.6
20°	2040.5	1734.8	1101.2	550.7	260.6	195.9	187.2	185.7	188.0	191.2	190.4
22.5°	1983.6	1642.3	927.4	378.4	200.7	177.8	172.2	169.8	171.4	173.8	173.0
25°	1943.3	1563.4	767.8	263.8	174.6	161.9	155.6	152.4	150.9	152.4	151.7
27.5°	1918.9	1497.0	617.8	198.2	156.4	146.2	138.2	132.0	128.0	128.0	126.4
30°	1903.0	1434.6	484.3	164.3	141.4	130.3	119.3	110.6	104.2	102.7	101.9
32.5°	1902.3	1380.9	361.8	145.4	127.2	114.6	101.1	90.0	83.0	81.3	80.6
35°	1922.0	1337.4	266.2	131.1	114.6	99.5	84.5	72.6	66.4	66.4	65.6
37.5°	1973.4	1312.1	201.4	120.1	104.2	86.8	71.1	60.0	54.5	56.1	56.1
40°	2068.9	1307.4	164.3	111.4	95.5	75.8	57.7	49.0	46.6	49.0	49.0
42.5°	2215.1	1332.7	146.2	105.1	87.7	64.8	48.2	41.8	41.1	43.5	43.5
45°	2405.5	1382.4	135.8	99.5	79.0	53.7	40.3	36.3	35.6	38.7	38.7
47.5°	2636.1	1449.6	126.4	93.2	70.3	44.2	34.0	30.8	30.8	34.0	34.8
50°	2909.5	1540.5	116.9	86.8	63.2	37.1	28.4	26.1	26.9	30.0	30.8
52.5°	3223.8	1651.9	108.2	81.3	55.3	30.0	23.7	22.1	22.9	26.1	26.9
55°	3494.8	1749.0	98.0	75.8	45.0	24.4	19.7	18.9	19.7	23.7	23.7
57.5°	3731.0	1842.2	88.5	67.1	35.6	19.7	15.8	15.8	17.4	21.4	22.1
60°	4044.6	1989.1	80.6	56.9	26.9	15.0	12.7	13.4	15.8	18.9	19.7
62.5°	4600.0	2238.7	70.3	47.4	19.7	11.9	10.2	11.0	14.2	18.2	18.9
65°	5295.2	2474.9	58.4	39.5	15.0	8.7	7.9	10.2	14.2	18.2	18.9
67.5°	5224.1	2152.7	45.8	31.6	11.0	7.2	6.3	9.5	13.4	18.2	18.9
70°	4236.7	1508.9	34.0	21.4	8.7	6.3	6.3	9.5	13.4	17.4	18.2
72.5°	2938.7	839.7	26.1	14.2	7.9	6.3	5.5	8.7	12.7	17.4	18.2
75°	1398.3	257.6	20.6	10.2	7.2	5.5	4.7	8.7	12.7	17.4	18.2
77.5°	268.6	65.6	16.6	8.7	6.3	5.5	4.7	7.9	12.7	16.6	17.4
80°	90.8	29.3	13.4	7.9	6.3	5.5	4.7	7.9	11.9	15.8	16.6
82.5°	49.8	16.6	11.9	7.2	6.3	4.7	4.0	7.2	11.0	15.8	16.6
85°	38.7	11.9	9.5	7.2	6.3	4.7	4.0	7.2	11.0	15.0	15.8
87.5°	19.7	8.7	7.9	7.2	6.3	4.7	4.0	6.3	10.2	14.2	15.8
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)