

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: P198667

Luminaire Tested: **XNV2-AF-02-LED-U-AFL-600-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198667  
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-600-HSS  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 615mA 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: 6822.1 lumens  
Efficiency: N/A  
Efficacy: 103.4 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

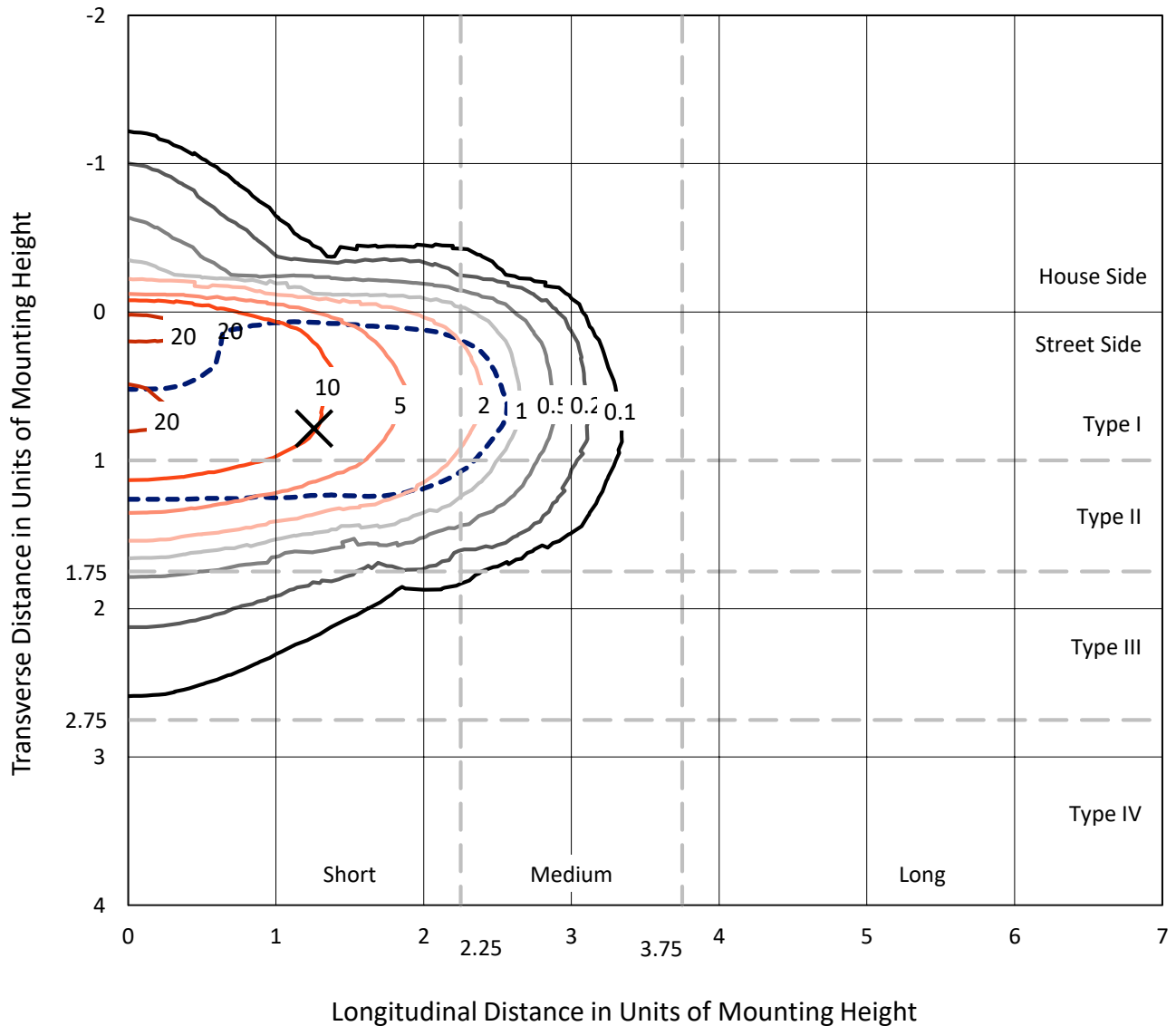
Input Watts (W): 66  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

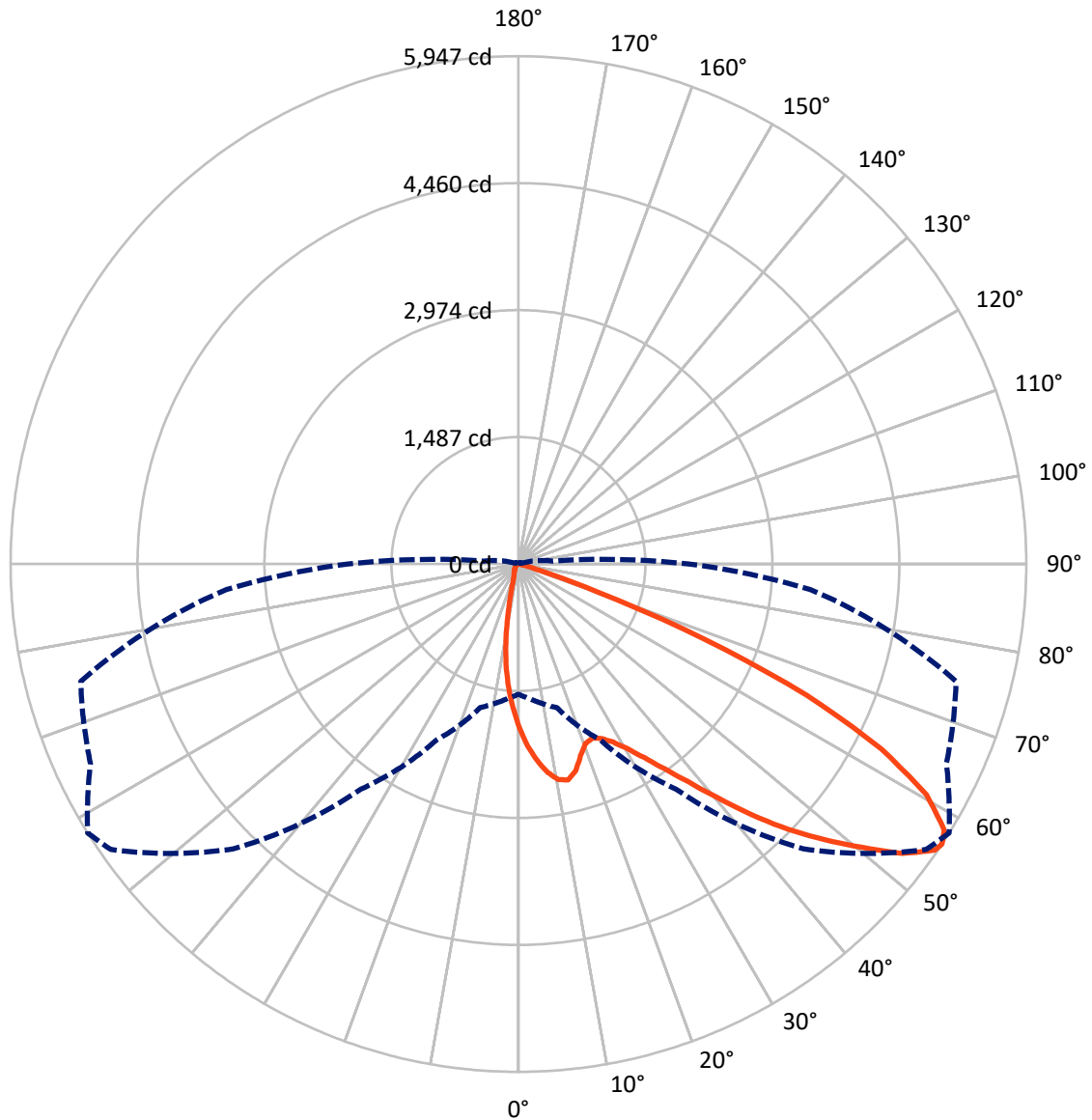
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 24 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P198667  
CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-600-HSS

### 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
<b>House Side</b>	Lumens	425.9	0.0	425.9
	% Fixture	6.2	0.0	6.2
<b>Street Side</b>	Lumens	6396.2	0.0	6396.2
	% Fixture	93.8	0.0	93.8
<b>Total</b>	Lumens	6822.1	0.0	6822.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.8	2.4
10°-20°	383.4	5.6
20°-30°	645.1	9.5
30°-40°	1104.7	16.2
40°-50°	1667.0	24.4
50°-60°	1732.8	25.4
60°-70°	972.8	14.3
70°-80°	133.3	2.0
80°-90°	18.1	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°	6822.1	100.0
0°-180°	6822.1	100.0



REPORT NUMBER: P198667

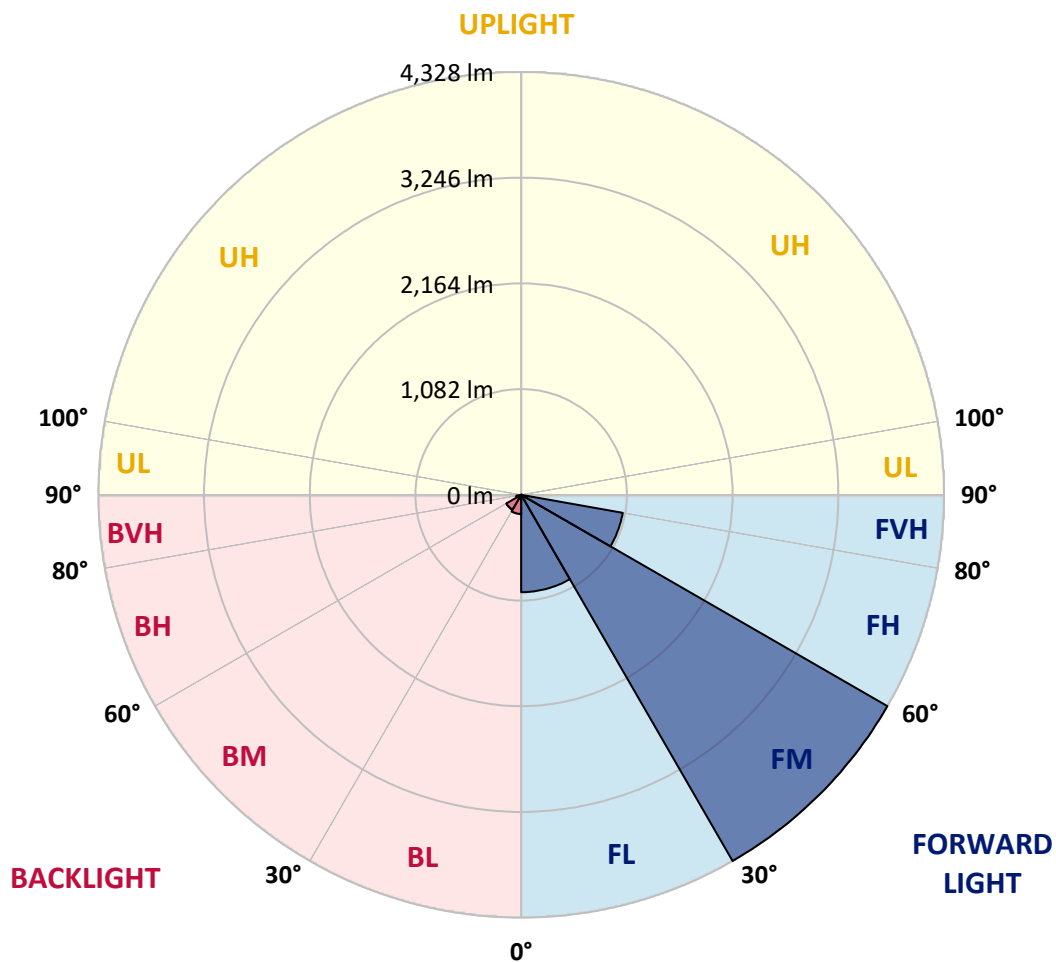
CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-600-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	996.9	14.6			
FM	(30°-60°)	4328.2	63.4			
FH	(60°-80°)	1055.6	15.5			G1/1800
FVH	(80°-90°)	15.6	0.2			G1/100
BL	(0°-30°)	196.4	2.9	B1/500		
BM	(30°-60°)	176.4	2.6	B0/220		
BH	(60°-80°)	50.5	0.7	B0/110		G0/110
BVH	(80°-90°)	2.5	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





REPORT NUMBER: P198667

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-600-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1931.5	1931.5	1931.5	1931.5	1931.5	1931.5	1931.5	1931.5	1931.5	1931.5	1931.5
2.5°	2323.9	2309.9	2295.4	2268.3	2243.3	2204.8	2151.7	2138.7	2097.0	2028.3	1964.4
5°	2524.3	2521.8	2511.9	2490.0	2463.0	2416.1	2356.3	2316.2	2251.6	2143.4	2020.0
7.5°	2405.7	2427.6	2463.5	2514.5	2548.8	2544.2	2498.4	2463.5	2399.4	2251.6	2074.6
10°	2027.8	2032.0	2081.4	2188.6	2358.3	2516.6	2576.4	2567.1	2508.3	2346.3	2122.5
12.5°	1894.6	1897.2	1908.6	1943.0	2053.4	2274.0	2545.2	2594.1	2589.4	2437.0	2173.6
15°	1904.9	1906.6	1909.6	1920.6	1951.8	2062.7	2387.0	2511.3	2641.5	2522.8	2223.5
17.5°	1987.2	1986.2	1976.3	1965.9	1975.7	2012.2	2225.6	2356.8	2630.5	2595.1	2264.6
20°	2147.6	2152.7	2119.5	2073.1	2049.2	2050.7	2145.9	2244.4	2569.1	2651.4	2295.4
22.5°	2372.9	2376.5	2321.9	2241.7	2171.5	2136.1	2162.6	2214.7	2498.4	2703.5	2320.4
25°	2642.0	2642.0	2565.5	2451.5	2342.8	2265.1	2242.3	2262.1	2471.2	2762.3	2345.3
27.5°	2932.4	2942.8	2842.9	2693.5	2549.9	2436.4	2364.6	2361.0	2492.1	2836.1	2373.5
30°	3248.4	3257.7	3139.0	2956.3	2786.2	2641.0	2530.6	2506.6	2571.7	2935.6	2414.6
32.5°	3562.7	3570.5	3439.4	3253.1	3054.7	2884.0	2738.8	2700.8	2714.9	3080.7	2474.9
35°	3962.5	3964.0	3798.0	3576.2	3364.5	3164.1	2980.3	2942.8	2927.3	3264.0	2561.9
37.5°	4280.5	4268.0	4162.9	3953.1	3710.0	3500.8	3284.8	3235.9	3198.4	3521.6	2696.6
40°	4355.4	4355.4	4339.9	4276.9	4083.7	3882.3	3673.1	3600.2	3517.4	3825.0	2877.8
42.5°	4160.2	4172.7	4275.8	4412.7	4414.2	4285.1	4080.7	4019.2	3873.5	4170.7	3075.6
45°	3723.5	3727.2	3974.5	4344.0	4594.9	4668.7	4517.9	4433.0	4231.0	4529.8	3256.7
47.5°	3566.4	3577.9	3682.9	4134.8	4608.4	4979.5	4937.4	4820.8	4562.1	4857.7	3425.9
50°	3324.9	3338.9	3467.5	3826.7	4486.6	5178.9	5338.7	5213.8	4863.4	5131.0	3509.6
52.5°	2747.1	2769.0	2950.6	3419.1	4182.1	5187.2	5706.1	5631.1	5172.0	5277.2	3499.7
55°	1890.4	1906.6	2118.4	2669.1	3568.0	4932.7	5864.4	5915.8	5447.4	5310.0	3451.8
56°	1525.0	1585.4	1740.6	2274.0	3218.2	4716.1	5828.0	5947.1	5529.2	5304.8	3431.1
57.5°	1008.2	1019.7	1188.8	1647.9	2584.2	4246.2	5663.5	5880.4	5634.3	5278.2	3415.9
60°	474.1	479.4	540.2	760.5	1398.6	3094.3	5128.9	5489.1	5672.8	5222.6	3415.4
62.5°	309.1	310.3	317.5	362.7	572.0	1685.3	4251.9	4770.2	5353.7	5216.3	3405.5
65°	254.5	257.2	248.3	254.0	299.3	635.6	2999.1	3718.9	4604.7	5069.5	3294.2
67.5°	224.3	224.8	212.9	206.1	219.1	279.0	1511.0	2345.8	3444.1	4307.5	2713.3
70°	204.6	204.1	190.5	174.9	175.4	185.3	492.3	974.4	1905.6	2557.7	1557.9
72.5°	181.7	182.7	174.9	153.0	145.8	131.1	185.3	262.8	648.6	821.3	410.7
75°	159.3	157.2	149.4	135.3	121.8	88.0	93.2	111.9	169.2	167.6	88.5
77.5°	120.7	118.7	122.3	115.6	95.2	61.4	51.0	58.3	76.5	71.3	35.9
80°	92.2	91.0	83.3	98.9	87.0	46.3	34.9	35.9	41.6	38.0	17.7
82.5°	66.6	66.1	63.0	60.9	55.1	33.9	26.5	28.1	31.2	26.5	13.0
85°	25.5	25.5	49.4	41.6	38.0	22.9	18.7	20.3	23.9	19.2	8.8
87.5°	4.2	4.2	33.3	27.6	17.2	11.5	12.0	13.0	14.0	11.5	6.8
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: P198667

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-600-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1931.5	1931.5	1931.5	1931.5	1931.5	1931.5	1931.5	1931.5	1931.5	1931.5	1931.5
2.5°	1926.3	1891.4	1814.9	1741.1	1676.5	1605.7	1569.8	1528.2	1512.5	1481.3	1484.4
5°	1946.1	1873.2	1719.7	1557.9	1409.5	1258.5	1151.3	1050.4	994.1	938.5	938.5
7.5°	1966.4	1855.0	1617.7	1359.0	1109.2	850.5	667.3	520.5	438.7	384.1	382.6
10°	1980.4	1831.6	1501.6	1128.4	760.0	438.2	264.4	208.2	187.9	179.0	178.5
12.5°	1998.6	1808.2	1369.4	856.7	422.1	208.2	165.0	156.1	152.5	150.4	150.4
15°	2014.3	1774.8	1209.1	576.2	221.8	156.1	142.1	139.0	138.4	137.9	138.4
17.5°	2018.0	1727.5	1017.0	337.3	160.8	136.4	130.1	127.6	127.6	126.9	126.9
20°	2009.6	1665.1	804.7	208.2	139.0	125.4	118.7	115.6	115.0	115.0	115.0
22.5°	1992.4	1585.4	594.9	157.7	126.4	115.6	106.7	103.6	103.6	104.1	104.6
25°	1971.1	1491.2	408.6	135.8	117.1	105.2	96.3	93.2	94.2	95.2	95.7
27.5°	1944.0	1378.7	267.5	117.6	104.6	94.7	87.0	84.8	87.0	89.0	90.0
30°	1916.9	1255.5	181.2	102.0	90.5	83.3	78.6	78.1	81.2	85.9	86.4
32.5°	1899.2	1128.9	136.9	91.7	79.6	73.3	71.3	72.3	77.0	82.2	83.3
35°	1897.7	1005.6	116.6	83.3	72.3	66.6	65.6	68.7	74.0	78.1	79.1
37.5°	1922.1	890.1	105.7	77.0	66.6	60.9	59.3	65.1	69.8	74.0	75.0
40°	1971.6	786.4	98.4	71.3	61.9	55.1	54.1	58.8	63.5	68.2	69.8
42.5°	2033.5	689.7	90.0	65.6	56.8	48.9	47.9	51.6	56.3	63.0	64.0
45°	2087.1	599.6	81.2	59.3	51.0	42.1	41.6	45.8	49.4	55.6	56.8
47.5°	2132.4	524.7	72.8	52.6	43.7	37.4	36.9	39.1	41.1	46.9	47.9
50°	2108.5	461.1	64.5	43.2	35.4	32.2	31.7	31.7	34.4	40.1	41.1
52.5°	2049.7	421.6	56.8	35.9	29.2	27.6	26.0	26.5	29.2	31.7	32.2
55°	2002.3	402.8	49.9	31.7	24.4	22.9	21.4	20.9	21.4	20.3	19.2
56°	1990.9	400.8	48.4	30.7	23.4	21.4	19.2	18.2	17.7	15.7	15.1
57.5°	1985.6	400.8	45.8	28.6	21.9	19.2	16.7	14.5	12.5	10.9	10.9
60°	1981.5	403.3	42.7	25.0	18.7	15.7	12.0	8.8	7.3	7.3	7.3
62.5°	1972.7	402.3	39.1	20.9	16.2	12.0	7.3	5.7	5.2	5.7	6.2
65°	1873.2	373.7	34.4	16.7	12.5	8.3	4.2	4.2	4.7	5.7	6.2
67.5°	1509.5	283.2	28.1	13.0	8.8	6.2	3.7	3.7	4.7	5.7	6.2
70°	829.1	149.4	23.9	9.4	6.8	5.2	3.7	3.2	4.7	5.7	6.2
72.5°	202.4	62.5	21.9	7.3	6.2	4.7	3.2	3.2	4.7	5.7	6.2
75°	49.9	46.9	17.7	5.7	5.2	4.2	3.2	3.2	4.7	5.7	6.2
77.5°	23.4	61.9	12.0	5.2	4.7	3.7	3.2	3.2	4.7	5.7	5.7
80°	14.0	46.9	7.3	4.7	4.2	3.7	3.2	3.2	4.7	5.7	6.2
82.5°	8.3	13.5	5.2	4.7	4.2	3.2	3.2	3.2	4.7	5.7	6.2
85°	7.3	6.8	5.2	4.7	4.2	3.7	3.2	3.2	5.2	6.2	6.2
87.5°	5.7	5.2	4.7	4.2	4.2	3.7	3.2	3.2	4.7	5.7	6.2
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)