

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: P198705

Luminaire Tested: **XNV2-AF-02-LED-U-SL2-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198705
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24257)
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-SL2-1200
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13265.6 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G3

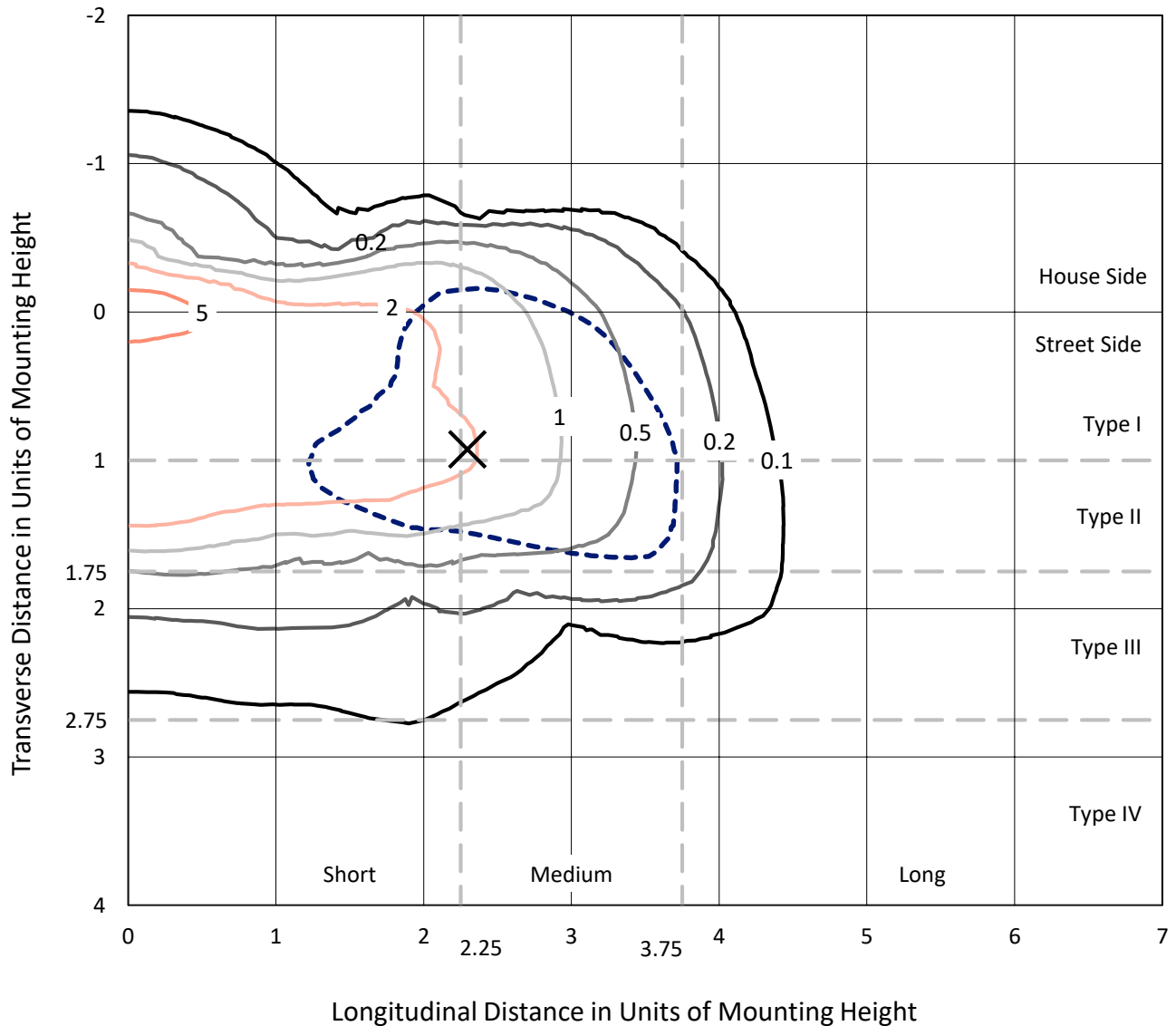
Input Watts (W): 128
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

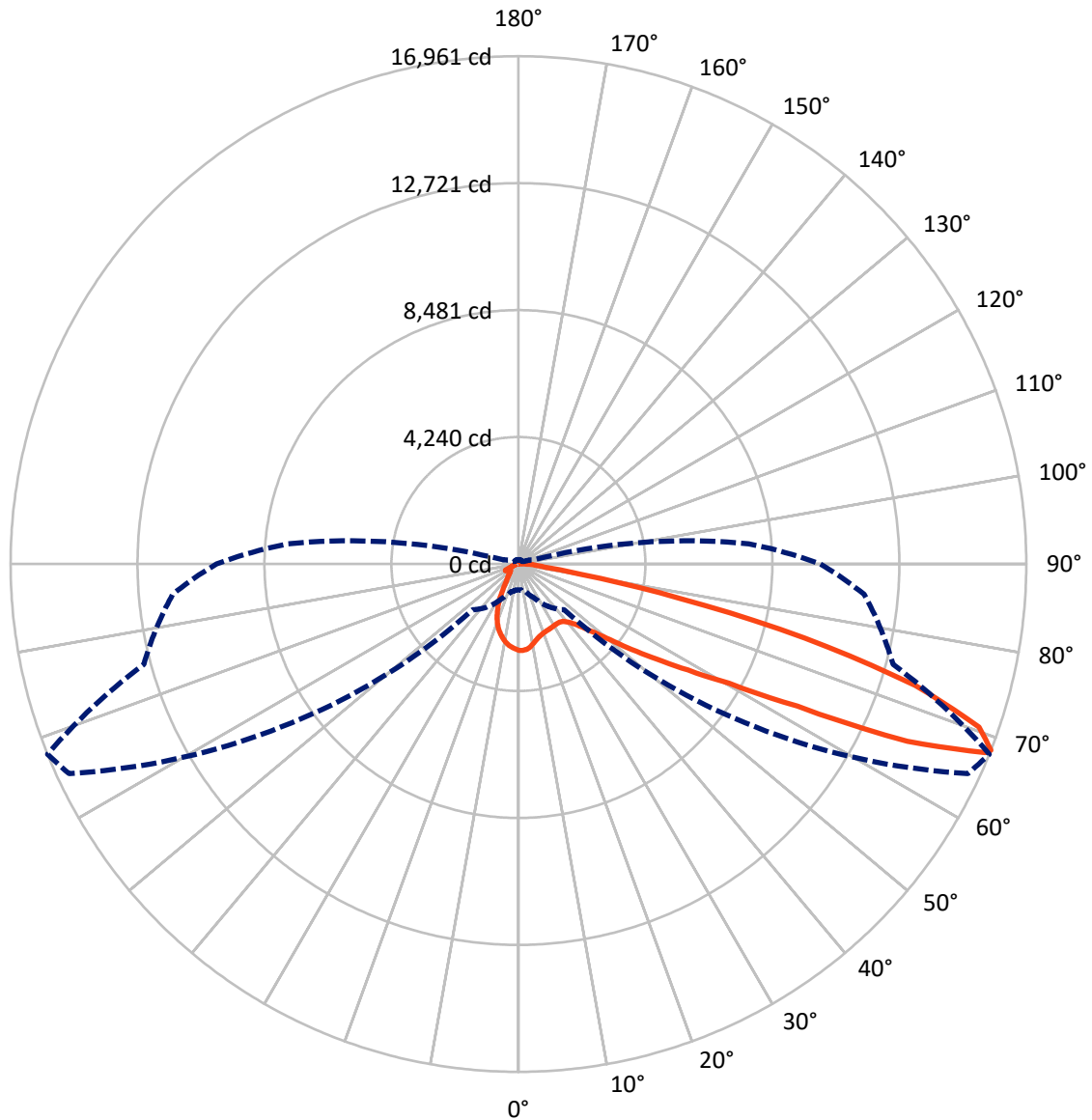
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.2 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2170.3	0.0	2170.3
	% Fixture	16.4	0.0	16.4
Street Side	Lumens	11095.3	0.0	11095.3
	% Fixture	83.6	0.0	83.6
Total	Lumens	13265.6	0.0	13265.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.3	1.9
10°-20°	573.6	4.3
20°-30°	775.8	5.8
30°-40°	1093.9	8.2
40°-50°	1798.7	13.6
50°-60°	2788.2	21.0
60°-70°	3615.1	27.3
70°-80°	2074.5	15.6
80°-90°	298.5	2.3
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°	13265.6	100.0
0°-180°	13265.6	100.0



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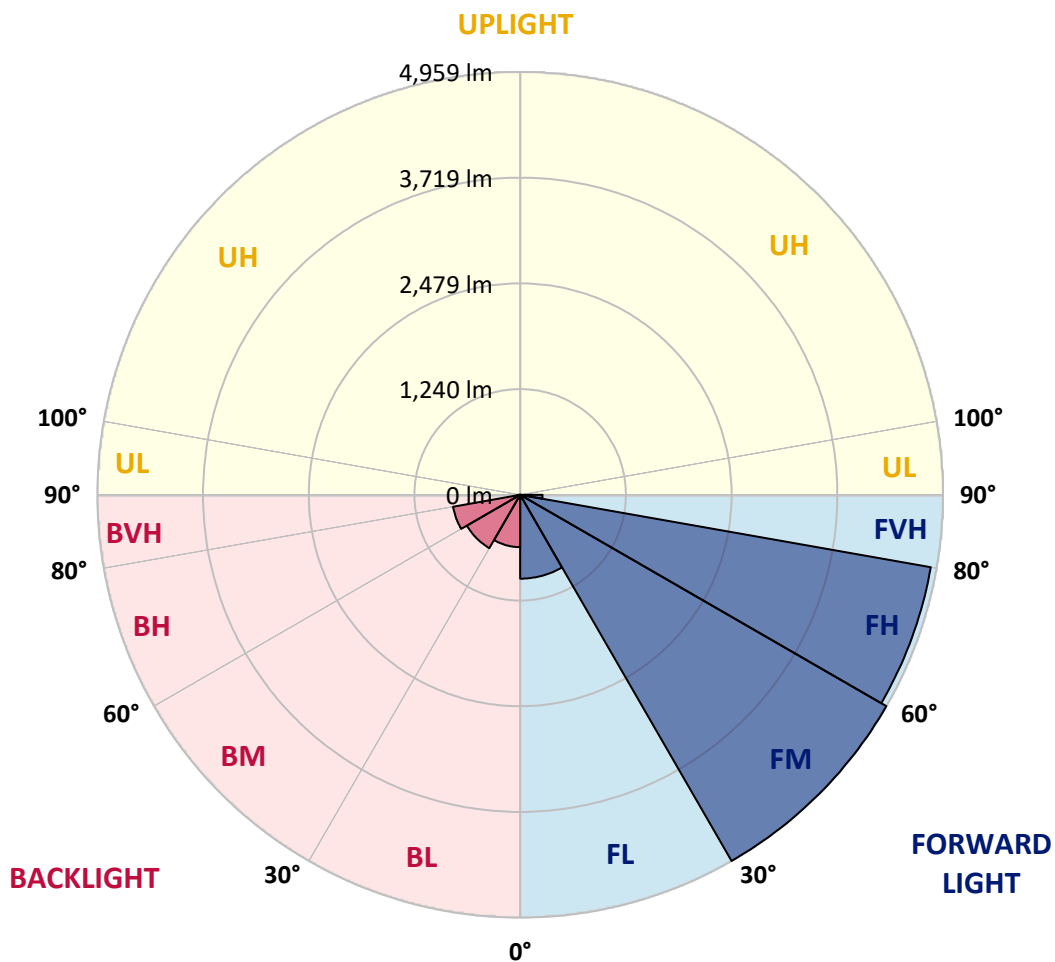
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	983.2	7.4			
FM	(30°-60°)	4958.9	37.4			
FH	(60°-80°)	4890.3	36.9			G2/5000
FVH	(80°-90°)	262.9	2.0			G3/500
BL	(0°-30°)	613.6	4.6	B2/1000		
BM	(30°-60°)	721.9	5.4	B1/1000		
BH	(60°-80°)	799.3	6.0	B2/1000		G2/1000
BVH	(80°-90°)	35.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	2886.5	2886.5	2886.5	2886.5	2886.5	2886.5	2886.5	2886.5	2886.5	2886.5	2886.5
2.5°	2809.3	2831.9	2831.9	2848.3	2863.0	2875.2	2885.6	2885.6	2885.6	2878.7	2872.7
5°	2513.9	2544.2	2548.5	2590.1	2644.7	2711.4	2786.0	2851.8	2864.8	2889.1	2898.6
7.5°	2308.5	2318.0	2334.5	2363.1	2418.6	2500.9	2617.8	2765.1	2800.7	2876.9	2916.8
10°	2162.9	2170.7	2184.6	2213.2	2263.4	2338.0	2453.2	2644.7	2703.7	2838.8	2917.7
12.5°	2056.3	2062.4	2075.4	2101.3	2152.5	2219.2	2337.1	2536.4	2609.1	2800.7	2929.8
15°	1973.2	1983.5	1993.9	2019.1	2071.1	2135.2	2254.8	2457.5	2536.4	2770.4	2952.3
17.5°	1940.2	1945.4	1947.2	1960.2	2006.9	2071.9	2191.5	2402.1	2483.5	2746.1	2969.6
20°	1961.0	1961.9	1944.5	1935.8	1962.7	2022.6	2138.7	2360.5	2443.6	2724.4	2976.6
22.5°	2052.0	2052.0	2006.9	1968.8	1950.6	1987.9	2103.1	2331.9	2422.0	2708.0	2976.6
25°	2225.3	2217.6	2147.3	2071.9	1991.4	1975.7	2080.6	2313.7	2405.6	2699.3	2965.3
27.5°	2453.2	2446.3	2357.0	2245.3	2099.6	2001.7	2072.8	2299.0	2389.1	2686.3	2941.1
30°	2730.5	2724.4	2623.1	2476.6	2261.7	2084.1	2091.0	2288.5	2376.1	2664.7	2900.4
32.5°	3007.0	3003.5	2922.9	2772.9	2485.3	2223.6	2138.7	2286.8	2369.2	2638.6	2851.0
35°	3285.1	3285.1	3235.7	3109.2	2786.0	2433.3	2238.3	2318.9	2382.1	2624.8	2808.5
37.5°	3695.8	3679.3	3587.5	3456.7	3164.6	2705.4	2399.4	2386.4	2432.4	2648.2	2794.6
40°	4331.9	4284.2	4054.6	3834.5	3578.0	3053.7	2635.2	2517.4	2545.1	2727.9	2827.5
42.5°	4997.4	4922.0	4617.8	4266.0	4005.2	3483.6	2944.6	2729.6	2728.7	2882.2	2932.4
45°	5568.4	5529.5	5200.2	4753.9	4493.1	3967.1	3335.3	3045.0	3013.8	3121.3	3134.3
47.5°	5900.4	5874.4	5675.9	5270.3	5071.9	4538.1	3831.1	3482.6	3423.7	3487.9	3467.9
50°	5808.5	5833.6	5776.4	5569.4	5694.2	5340.5	4462.7	4082.3	3970.6	4034.6	3986.1
52.5°	5325.0	5392.6	5443.6	5483.5	6052.0	6414.2	5256.5	4831.0	4738.3	4727.1	4680.2
55°	4454.0	4561.5	4722.7	5015.6	5955.8	7276.5	6642.9	5736.6	5601.4	5530.4	5548.5
57.5°	3031.2	3194.1	3541.6	4098.8	5455.8	7643.9	8693.2	6906.5	6677.6	6424.6	6483.6
60°	1669.9	1805.9	2219.2	2780.8	4314.6	7589.3	10510.4	8807.6	8087.6	7416.8	7538.1
62.5°	1080.5	1110.0	1417.7	1899.5	2648.2	6700.1	11520.0	11985.3	10459.3	8725.3	8896.0
65°	868.3	889.0	1039.8	1532.1	1844.9	4310.2	11565.0	15281.7	14275.6	10503.5	10508.7
67.5°	848.3	857.8	945.4	1288.6	1730.5	2346.6	9996.6	16581.4	16814.5	12602.2	11587.5
68°	860.5	871.8	960.1	1248.7	1729.6	2162.9	9239.2	16561.6	16961.0	12953.2	11587.5
70°	759.1	772.9	979.2	1292.0	1656.0	1859.6	6326.6	15681.9	16325.0	13759.9	10994.8
72.5°	396.9	385.7	484.4	1019.9	1863.9	1937.6	3342.3	13101.3	13851.8	12743.5	9499.1
75°	309.3	281.6	271.2	402.9	1639.5	2009.5	1941.0	9311.9	9878.6	9186.3	6349.3
77.5°	291.1	257.4	237.4	238.3	721.8	2091.0	1570.2	5480.0	5480.0	4382.1	2026.0
80°	233.9	202.7	189.8	216.7	348.3	1927.2	1638.7	2497.4	2130.0	1132.6	558.0
82.5°	154.3	137.8	138.6	175.9	264.3	1286.9	1897.8	1233.1	926.4	501.8	328.5
85°	97.9	84.1	93.6	123.1	197.5	573.7	1878.6	857.0	613.6	281.6	163.8
87.5°	49.4	38.2	46.7	64.1	120.4	164.7	1546.8	765.2	454.9	117.0	89.3
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°	2886.5	2886.5	2886.5	2886.5	2886.5	2886.5	2886.5	2886.5	2886.5	2886.5	2886.5
2.5°	2872.7	2853.5	2844.0	2828.5	2809.3	2790.3	2777.3	2771.3	2767.8	2769.5	2768.6
5°	2893.4	2868.3	2827.5	2769.5	2709.7	2646.5	2597.9	2560.7	2537.2	2530.4	2528.6
7.5°	2909.0	2872.7	2796.3	2690.7	2588.4	2477.5	2383.1	2307.7	2256.5	2233.1	2232.3
10°	2906.4	2859.7	2739.2	2583.2	2433.3	2270.3	2122.2	1995.7	1903.8	1859.6	1857.9
12.5°	2909.0	2844.9	2669.0	2457.5	2242.6	2009.5	1789.4	1592.7	1455.8	1390.8	1388.2
15°	2919.4	2829.3	2597.1	2317.2	2019.9	1690.6	1376.1	1129.1	1004.3	961.9	961.9
17.5°	2918.6	2803.3	2513.9	2154.2	1755.6	1314.6	939.4	786.9	774.7	813.7	819.8
20°	2901.2	2761.7	2406.4	1961.0	1445.4	909.9	636.9	615.2	712.3	819.8	831.9
22.5°	2874.4	2708.0	2282.5	1736.6	1084.0	592.7	491.3	524.3	656.0	789.4	808.5
25°	2837.1	2643.0	2140.4	1475.7	721.0	426.4	409.9	450.6	543.3	632.6	646.4
27.5°	2782.5	2560.7	1985.2	1193.3	460.1	351.0	357.0	385.7	425.4	463.6	471.4
30°	2714.0	2464.5	1816.2	880.5	349.2	313.7	324.1	341.5	358.7	383.0	388.2
32.5°	2644.7	2366.6	1640.4	604.9	305.0	293.8	304.1	313.7	328.5	344.8	348.3
35°	2582.3	2275.6	1459.2	422.0	285.9	280.8	285.9	292.1	306.8	323.3	325.0
37.5°	2537.2	2201.1	1270.4	333.6	274.7	269.5	272.1	274.7	292.1	316.3	318.9
40°	2531.2	2151.7	1078.9	299.8	266.1	259.1	257.4	259.1	281.6	309.3	312.0
42.5°	2590.1	2154.2	891.7	285.9	259.1	251.3	244.4	247.9	267.8	289.4	291.1
45°	2729.6	2214.9	729.7	279.9	253.1	246.9	236.6	238.3	247.9	259.1	260.9
47.5°	2975.8	2347.5	605.7	276.4	247.9	242.6	229.7	224.4	225.3	231.4	231.4
50°	3369.2	2569.3	530.3	272.9	243.5	233.9	219.2	208.9	206.2	209.7	210.5
52.5°	3955.9	2949.8	494.0	266.1	235.7	222.7	206.2	195.8	191.5	195.0	195.0
55°	4748.7	3557.2	476.6	256.5	226.2	208.9	194.2	185.5	182.0	184.5	184.5
57.5°	5652.5	4346.6	506.1	243.5	214.0	194.2	183.7	177.7	175.0	177.7	178.5
60°	6726.2	5379.6	708.8	227.0	201.0	181.1	175.0	171.5	169.8	172.5	172.5
62.5°	8153.4	6753.9	1097.0	214.0	187.2	169.0	167.3	165.5	163.8	166.3	166.3
65°	9694.1	8004.3	1129.1	206.2	175.0	158.6	159.5	159.5	157.7	160.3	160.3
67.5°	10184.6	7896.1	630.9	196.7	160.3	148.2	151.6	151.6	150.8	153.3	152.5
68°	10080.6	7724.4	549.4	194.2	157.7	145.6	149.0	149.9	149.0	151.6	150.8
70°	9305.9	6781.7	361.3	179.4	146.5	136.9	142.1	143.0	142.1	145.6	144.7
72.5°	7682.0	5086.6	266.9	156.8	132.6	125.6	130.8	131.8	132.6	136.1	135.1
75°	4878.7	2809.3	210.5	133.5	118.8	112.6	117.8	120.4	122.1	127.4	124.8
77.5°	1336.2	852.7	170.7	113.5	102.3	99.6	103.1	106.6	108.3	114.4	110.1
80°	467.9	377.0	142.1	96.2	84.9	84.1	87.6	90.9	92.7	97.9	92.7
82.5°	284.3	246.1	113.5	75.4	66.7	65.9	70.2	73.7	75.4	75.4	71.9
85°	148.2	130.0	83.2	52.9	45.9	43.4	51.1	55.4	56.4	55.4	52.9
87.5°	83.2	73.7	44.2	25.2	20.8	21.7	26.9	32.9	35.5	34.7	32.9
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)