

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: P198737

Luminaire Tested: **XNV2-AF-02-LED-U-SL4-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198737
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24284)
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-SL4-1200
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12909.6 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G3

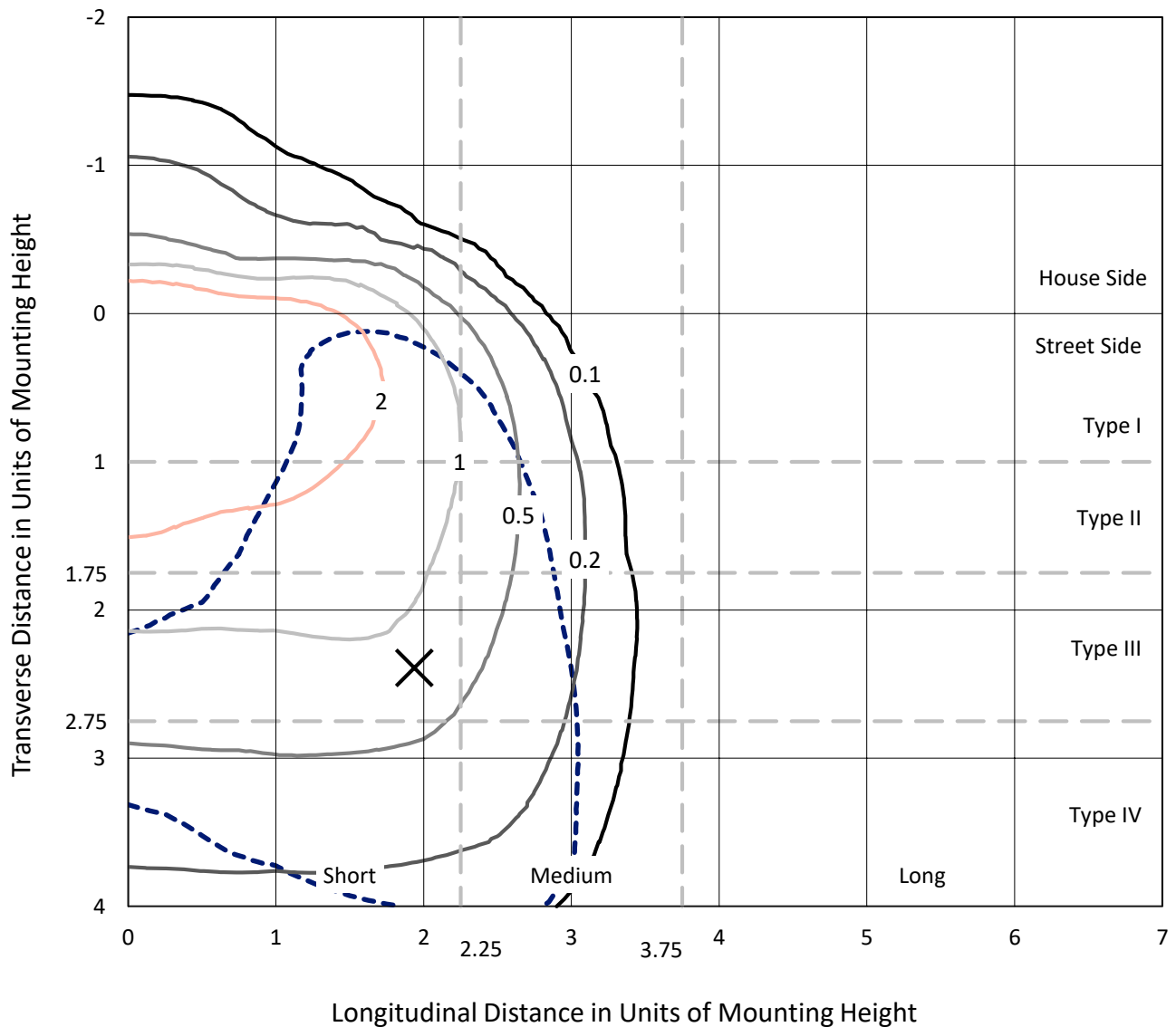
Input Watts (W): 128
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

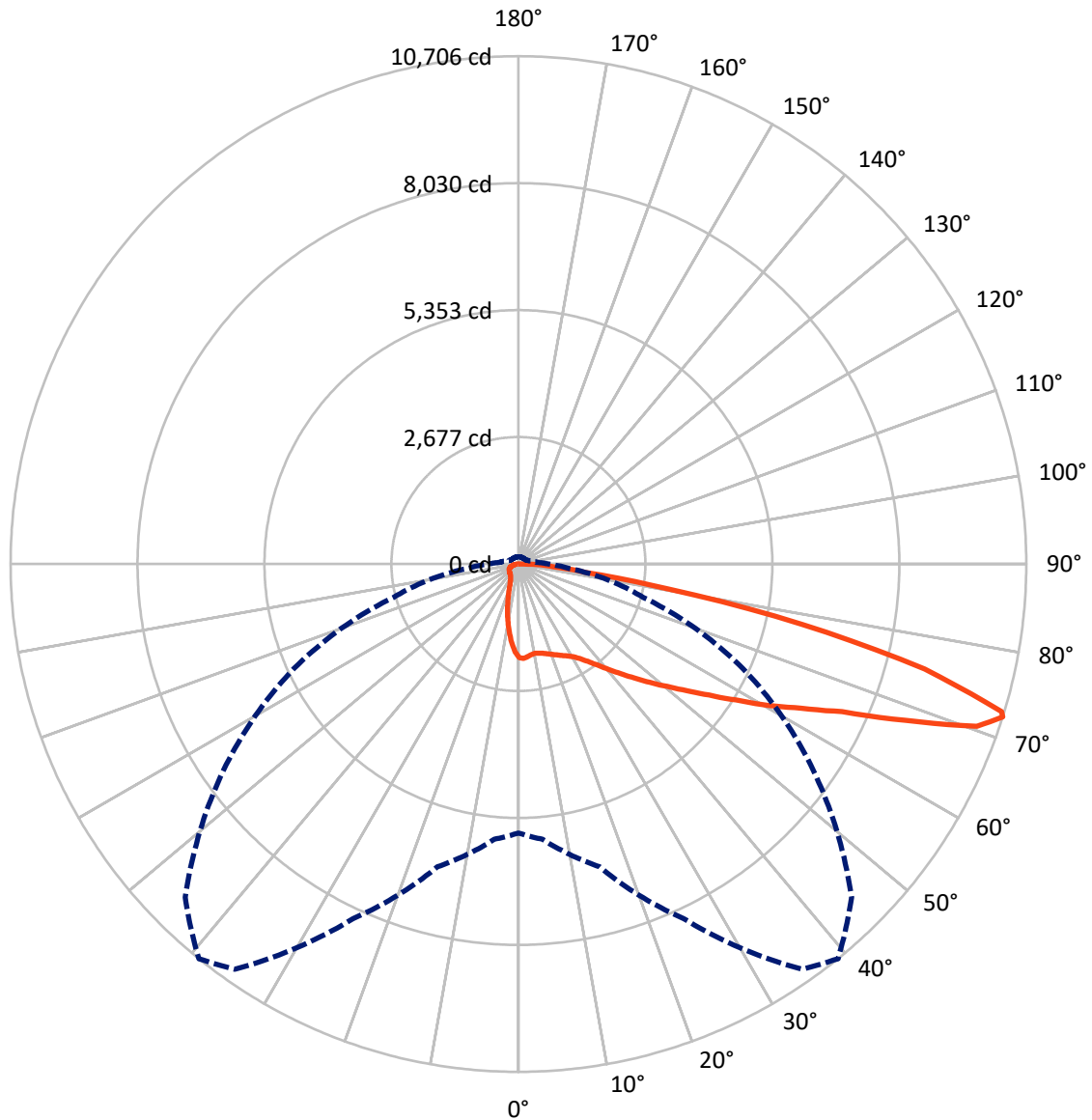
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.9 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1480.3	0.0	1480.3
	% Fixture	11.5	0.0	11.5
Street Side	Lumens	11429.4	0.0	11429.4
	% Fixture	88.5	0.0	88.5
Total	Lumens	12909.6	0.0	12909.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.4	1.3
10°-20°	425.7	3.3
20°-30°	663.4	5.1
30°-40°	1021.5	7.9
40°-50°	1665.3	12.9
50°-60°	2587.7	20.0
60°-70°	3463.5	26.8
70°-80°	2490.8	19.3
80°-90°	422.2	3.3
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°	12909.6	100.0
0°-180°	12909.6	100.0

Coefficient of Utilization



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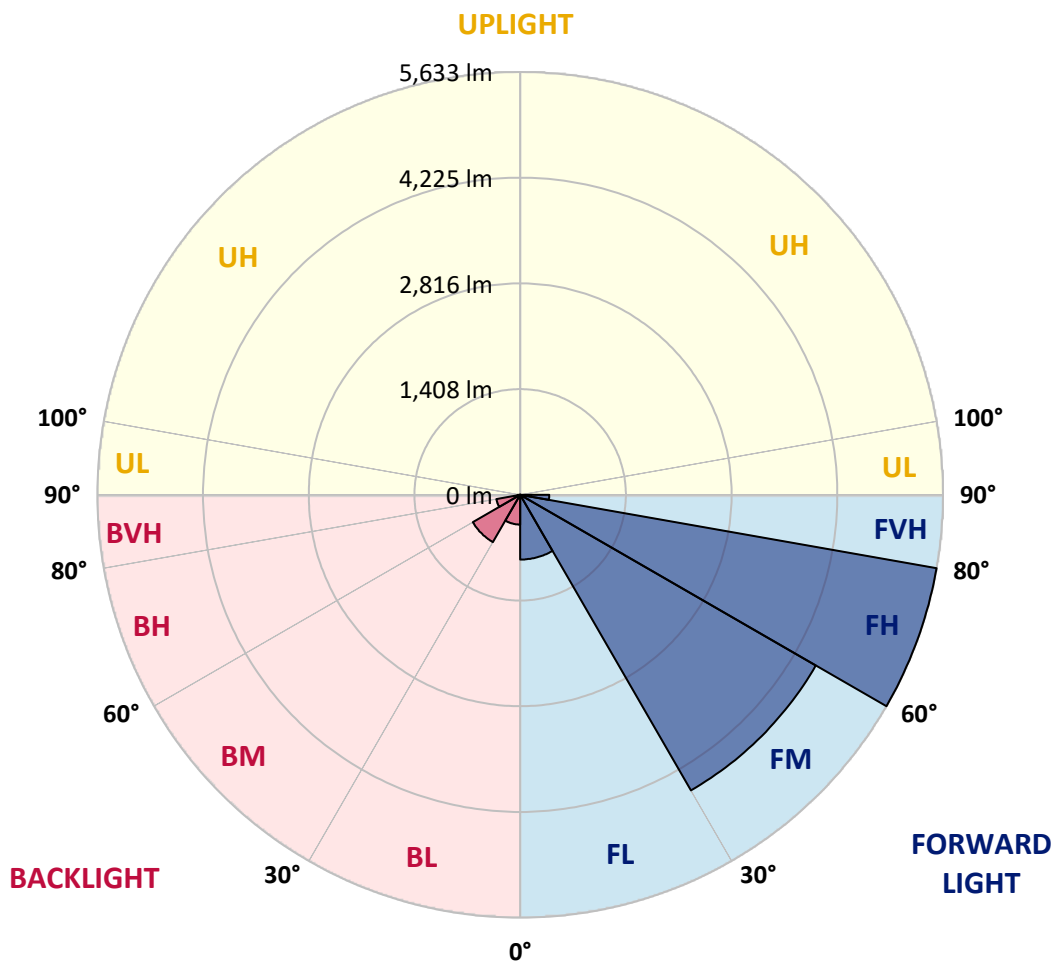
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	862.3	6.7			
FM	(30°-60°)	4547.0	35.2			
FH	(60°-80°)	5632.7	43.6			G3/7500
FVH	(80°-90°)	387.3	3.0			G3/500
BL	(0°-30°)	396.3	3.1	B1/500		
BM	(30°-60°)	727.5	5.6	B1/1000		
BH	(60°-80°)	321.6	2.5	B1/500		G1/500
BVH	(80°-90°)	34.9	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1971.5	1971.5	1971.5	1971.5	1971.5	1971.5	1971.5	1971.5	1971.5	1971.5	1971.5
2.5°	2014.0	2014.9	2012.2	2004.5	1997.5	1994.0	1988.0	1977.6	1963.8	1954.2	1946.4
5°	1995.0	1997.5	1995.8	1982.8	1970.7	1963.8	1954.2	1939.5	1921.3	1913.4	1895.3
7.5°	1980.2	1982.0	1976.8	1962.0	1938.6	1929.9	1912.6	1893.6	1877.1	1865.8	1844.2
10°	1969.8	1971.5	1967.2	1952.5	1926.4	1916.1	1895.3	1874.5	1852.8	1839.0	1814.7
12.5°	1955.1	1958.5	1958.5	1951.6	1934.3	1927.3	1906.6	1884.0	1864.1	1849.4	1819.0
15°	1952.5	1956.8	1964.6	1963.8	1958.5	1953.3	1936.9	1914.4	1897.0	1879.7	1842.4
17.5°	1974.1	1983.7	1999.3	2004.5	2001.0	1989.7	1970.7	1949.8	1930.8	1914.4	1868.4
20°	2028.7	2033.9	2057.4	2067.7	2050.4	2033.9	2008.8	1982.0	1964.6	1951.6	1892.7
22.5°	2111.1	2118.0	2137.0	2138.0	2101.6	2081.6	2049.5	2016.6	2000.2	1995.0	1925.6
25°	2242.8	2241.1	2246.3	2224.6	2158.7	2135.3	2096.3	2058.2	2046.9	2057.4	1974.1
27.5°	2400.5	2396.2	2379.7	2323.3	2223.7	2193.4	2146.6	2112.8	2112.8	2137.0	2040.0
30°	2582.5	2578.1	2524.4	2430.0	2300.8	2266.1	2216.7	2181.2	2199.4	2246.3	2129.3
32.5°	2774.9	2759.3	2683.9	2557.4	2410.9	2372.7	2325.1	2288.8	2323.3	2403.1	2257.6
35°	2956.0	2947.3	2854.6	2704.7	2553.0	2521.0	2488.0	2443.0	2498.5	2622.3	2438.6
37.5°	3143.2	3136.3	3022.7	2863.2	2726.4	2704.7	2677.0	2645.8	2735.1	2897.9	2683.9
40°	3352.0	3338.2	3195.2	3035.7	2928.3	2917.9	2903.1	2894.4	3038.4	3281.0	2994.2
42.5°	3588.6	3561.7	3377.2	3225.5	3148.4	3157.0	3149.3	3183.9	3404.1	3722.9	3363.3
45°	3859.0	3805.3	3558.3	3427.4	3391.9	3426.6	3443.0	3531.4	3836.5	4233.4	3775.8
47.5°	4112.1	4042.7	3756.8	3646.7	3666.7	3726.4	3773.3	3929.2	4310.5	4737.8	4197.0
50°	4345.2	4267.1	3969.0	3873.7	3970.8	4055.7	4152.8	4372.9	4814.8	5256.8	4583.5
52.5°	4517.7	4461.3	4181.4	4121.6	4320.0	4432.7	4587.8	4866.0	5324.5	5751.6	4928.4
55°	4651.1	4620.8	4388.5	4405.8	4715.2	4876.4	5064.4	5384.2	5863.5	6195.4	5205.7
57.5°	4805.3	4782.8	4625.1	4749.0	5205.7	5408.5	5630.3	5985.7	6376.5	6586.3	5423.3
60°	4968.3	4968.3	4888.6	5162.4	5819.3	6051.6	6272.5	6548.9	6887.8	6938.1	5511.7
62.5°	5091.3	5123.3	5152.0	5602.6	6401.6	6690.2	6932.8	7198.1	7417.3	7111.3	5303.7
65°	5269.8	5338.3	5499.5	6111.3	7122.6	7500.5	7828.0	8050.8	7846.2	6973.6	4625.1
67.5°	5576.6	5678.0	6021.2	6868.7	8226.7	8792.6	9110.6	8725.9	7762.3	6106.1	3542.7
70°	5853.1	5996.0	6582.8	7829.8	9661.8	10249.4	10103.0	8569.1	6760.4	4476.0	2179.5
72°	5669.4	5825.3	6608.8	8248.4	10428.8	10706.1	9934.0	7594.1	5223.9	2731.6	1074.6
72.5°	5548.9	5710.9	6524.7	8238.0	10449.5	10648.0	9699.1	7206.7	4742.1	2390.1	869.2
75°	4635.5	4774.1	5610.4	7301.2	9208.6	8844.6	7568.9	4664.0	2179.5	772.1	447.1
77.5°	3027.0	3132.8	3868.5	5058.4	6450.1	6100.1	4606.9	2183.9	817.2	468.8	336.2
80°	1520.9	1596.3	2070.4	2659.6	3481.2	3203.0	2126.6	1056.4	546.9	338.8	264.3
82.5°	1058.1	1127.5	1425.6	1358.0	1455.0	1408.2	1000.0	881.4	409.1	214.0	138.6
85°	887.4	959.3	1179.5	968.0	792.1	721.9	716.7	832.8	270.4	105.8	117.0
87.5°	773.9	883.1	973.2	707.2	543.4	479.3	527.7	763.5	85.8	58.1	35.5
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°	1971.5	1971.5	1971.5	1971.5	1971.5	1971.5	1971.5	1971.5	1971.5	1971.5	1971.5
2.5°	1933.4	1930.8	1917.8	1897.9	1883.2	1873.6	1855.4	1854.5	1856.2	1840.7	1846.7
5°	1878.9	1868.4	1834.6	1788.6	1751.4	1715.9	1676.9	1663.9	1652.6	1629.3	1631.8
7.5°	1821.6	1803.5	1744.4	1669.0	1597.1	1531.3	1466.3	1434.3	1409.9	1379.7	1379.7
10°	1787.8	1759.2	1669.0	1559.1	1444.6	1348.5	1251.4	1193.3	1150.8	1111.8	1109.3
12.5°	1786.1	1742.7	1617.1	1465.5	1308.6	1173.4	1040.8	951.5	888.2	842.3	838.0
15°	1800.0	1739.3	1573.8	1377.9	1180.3	1004.4	840.7	727.1	646.5	595.4	590.1
17.5°	1812.1	1734.9	1527.0	1286.1	1055.5	841.5	659.5	541.7	465.3	423.8	419.4
20°	1823.3	1725.4	1467.2	1189.0	917.7	689.0	515.7	420.3	370.0	346.7	344.0
22.5°	1839.8	1716.7	1404.8	1079.8	782.6	560.7	425.5	357.0	330.2	319.0	317.2
25°	1866.7	1717.6	1344.2	968.0	658.6	467.1	368.3	325.8	311.1	303.3	303.3
27.5°	1905.7	1728.0	1284.3	854.5	553.7	402.9	334.5	309.3	299.8	293.8	292.1
30°	1962.8	1747.1	1221.1	747.1	470.6	358.7	314.6	299.0	291.1	286.0	285.1
32.5°	2046.1	1780.9	1154.3	649.1	407.3	327.5	299.8	290.3	284.3	279.9	279.1
35°	2170.0	1840.7	1089.3	565.9	362.2	305.0	287.8	279.9	276.4	274.8	273.8
37.5°	2352.0	1936.9	1027.8	500.9	332.8	290.3	275.6	271.3	269.5	269.5	269.5
40°	2580.8	2063.4	972.3	455.0	316.3	279.1	266.9	263.4	263.4	264.3	264.3
42.5°	2858.9	2222.0	924.6	423.8	306.8	271.3	260.9	259.1	258.3	258.3	259.1
45°	3182.2	2409.2	895.2	399.5	299.8	266.9	256.6	255.6	252.2	250.4	250.4
47.5°	3507.2	2609.3	893.4	385.7	291.1	261.7	252.2	252.2	245.2	241.8	242.6
50°	3810.5	2788.8	912.6	382.2	286.0	253.9	247.9	248.7	239.2	234.9	233.9
52.5°	4054.9	2925.6	935.9	386.5	286.0	246.9	240.1	244.4	233.9	228.8	227.9
55°	4243.8	3021.0	944.6	396.1	289.5	240.9	233.1	240.1	232.2	225.4	225.4
57.5°	4378.9	3051.4	907.4	400.4	294.6	240.1	226.2	239.2	234.9	226.2	226.2
60°	4329.5	2875.4	768.6	383.9	293.8	238.3	221.0	240.9	243.6	233.9	233.9
62.5°	3943.9	2405.7	617.0	346.7	279.1	232.2	214.9	239.2	249.6	246.1	244.4
65°	3210.7	1764.4	478.3	302.5	253.9	219.2	201.9	223.6	235.7	239.2	240.1
67.5°	2262.7	1117.1	371.7	257.4	222.7	200.2	187.2	197.6	201.9	203.7	207.1
70°	1237.6	604.9	295.5	216.7	190.7	181.2	171.5	172.5	170.7	169.0	170.7
72°	621.3	395.2	249.6	188.0	169.0	163.0	158.6	156.0	156.0	153.3	154.3
72.5°	534.7	367.4	240.9	181.2	163.8	158.6	155.1	152.5	151.7	150.0	150.8
75°	356.2	291.1	201.0	151.7	139.5	136.1	137.8	135.2	136.1	134.3	135.2
77.5°	287.8	250.4	170.7	128.3	119.6	114.4	117.8	118.8	120.5	118.8	117.8
80°	240.9	213.2	143.0	105.8	99.6	95.3	97.1	103.1	104.0	98.8	97.9
82.5°	156.0	171.5	112.6	82.3	76.3	74.6	78.9	84.9	86.6	79.7	77.9
85°	130.8	137.8	81.4	56.4	50.2	48.5	57.2	63.2	67.6	60.7	58.9
87.5°	36.4	67.6	39.9	26.9	22.5	22.5	27.7	32.9	39.0	39.9	39.9
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)