

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: P198549

Luminaire Tested: **XNV2-AF-02-LED-U-SL3-7030-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198549  
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-SL3-7030-800-HSS  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 800mA 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: 7321 lumens  
Efficiency: N/A  
Efficacy: 86.1 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): 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

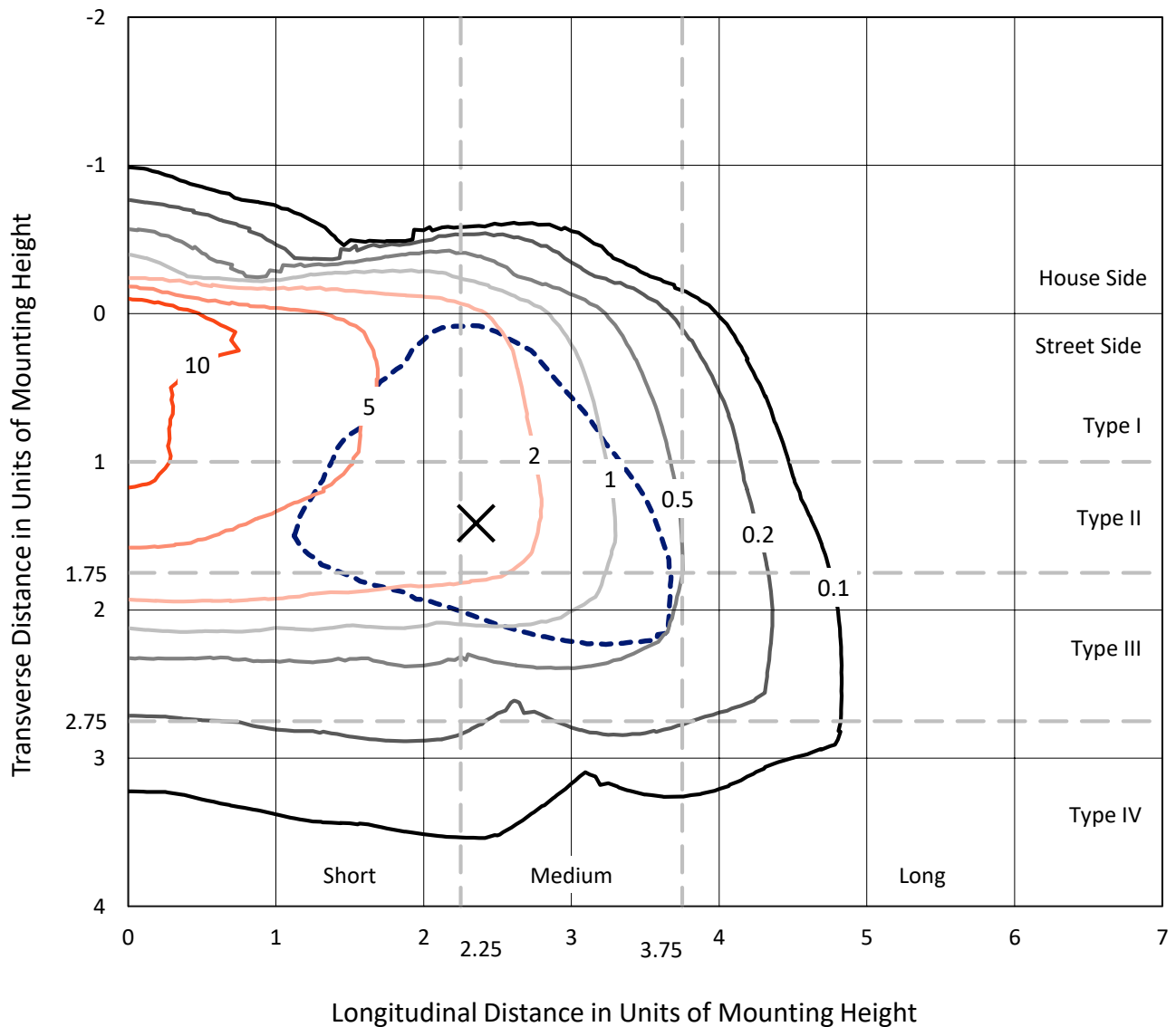


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

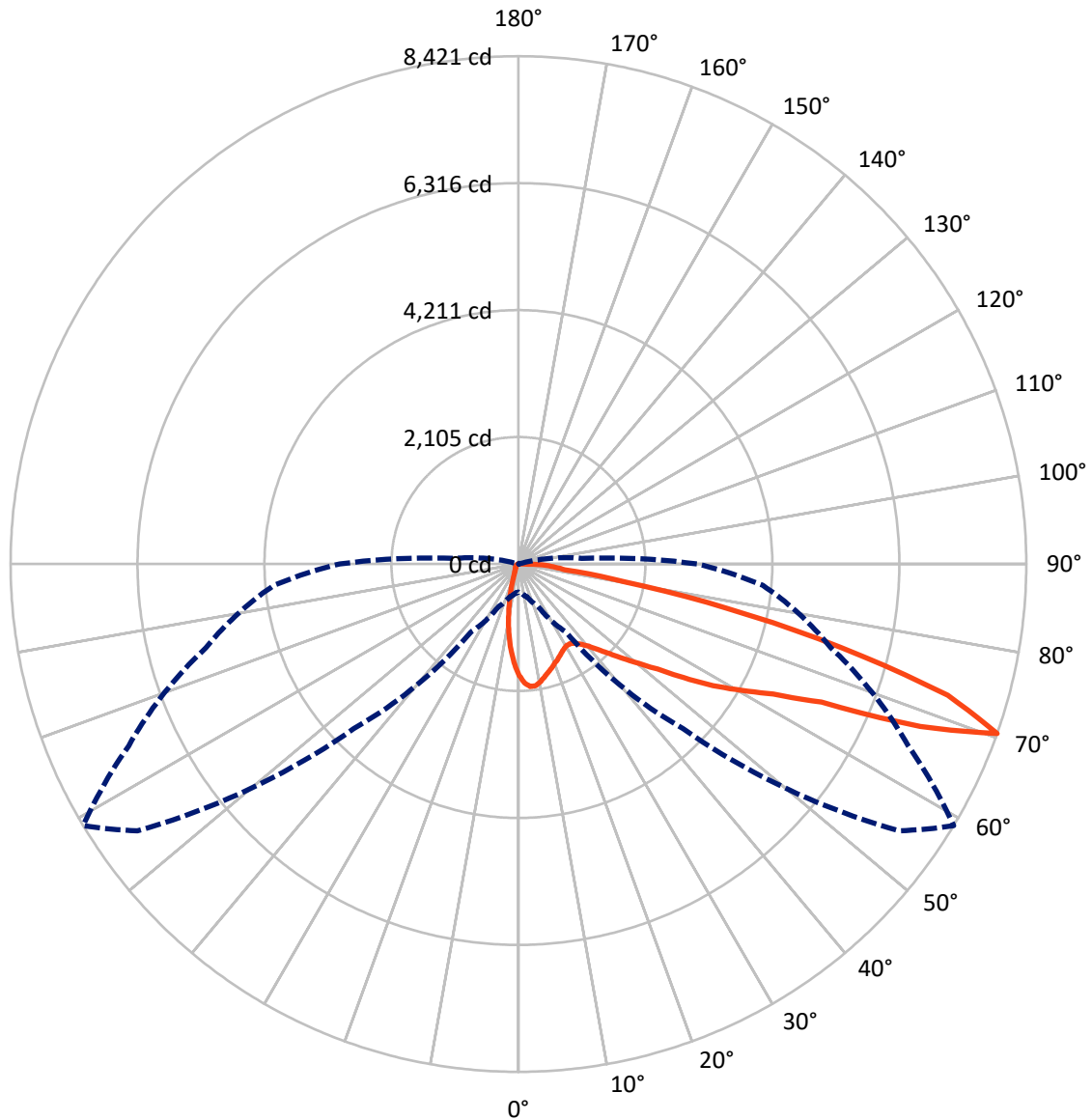


Based on 10 foot mounting height. Maximum calculated value = 19.7 fc  
 Type III - Medium - Non-Cutoff

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### 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
<b>House Side</b>	Lumens	562.8	0.0	562.8
	% Fixture	7.7	0.0	7.7
<b>Street Side</b>	Lumens	6758.2	0.0	6758.2
	% Fixture	92.3	0.0	92.3
<b>Total</b>	Lumens	7321.0	0.0	7321.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.2	2.1
10°-20°	319.3	4.4
20°-30°	432.2	5.9
30°-40°	623.7	8.5
40°-50°	1035.9	14.1
50°-60°	1584.5	21.6
60°-70°	1970.8	26.9
70°-80°	1089.4	14.9
80°-90°	113.0	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°	7321.0	100.0
0°-180°	7321.0	100.0

**Coefficient of Utilization**



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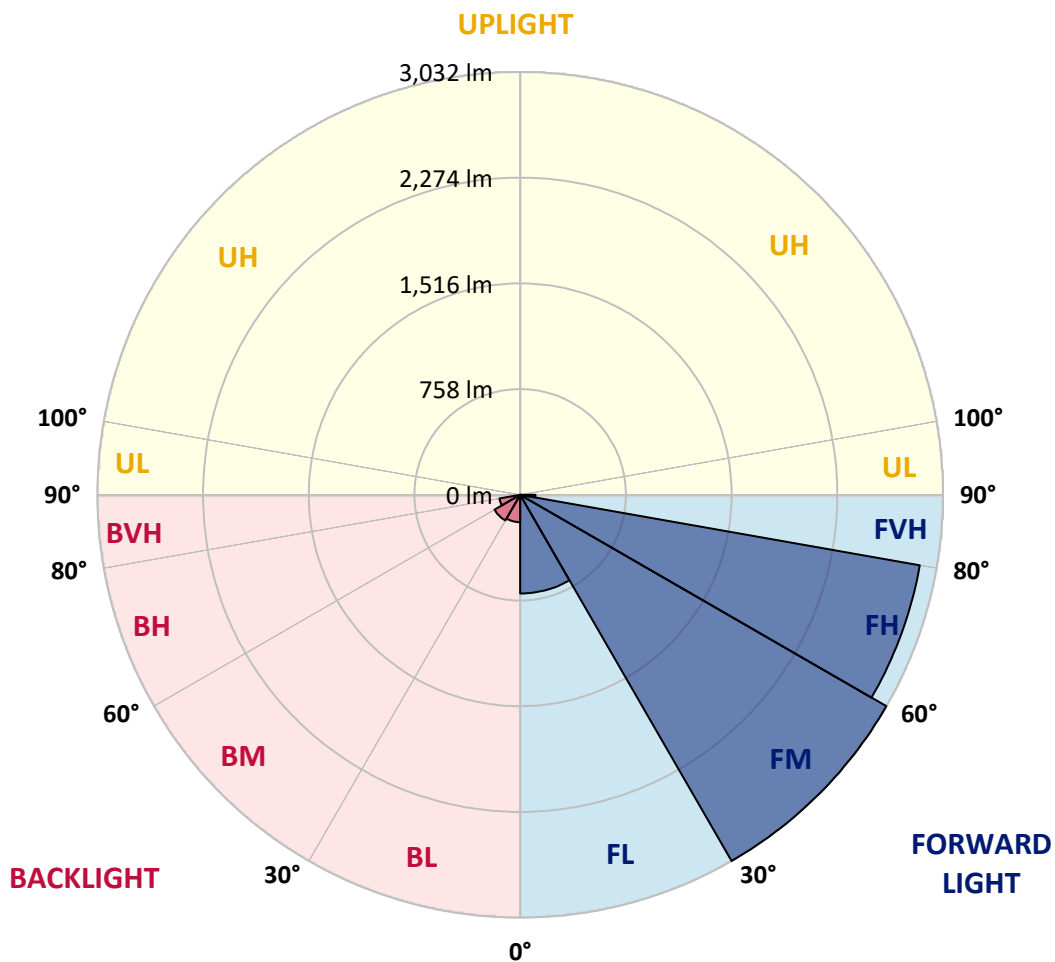
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	707.6	9.7			
FM	(30°-60°)	3031.7	41.4			
FH	(60°-80°)	2909.2	39.7			G2/5000
FVH	(80°-90°)	109.7	1.5			G2/225
BL	(0°-30°)	196.1	2.7	B1/500		
BM	(30°-60°)	212.4	2.9	B0/220		
BH	(60°-80°)	151.0	2.1	B1/500		G1/500
BVH	(80°-90°)	3.3	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1851.2	1851.2	1851.2	1851.2	1851.2	1851.2	1851.2	1851.2	1851.2	1851.2	1851.2
2.5°	2092.6	2089.2	2075.4	2072.7	2057.2	2026.3	1990.4	1976.0	1946.8	1900.4	1849.0
5°	2127.4	2129.0	2130.1	2124.0	2121.8	2096.4	2056.7	2039.5	2000.3	1924.1	1830.2
7.5°	1997.0	2001.4	2015.2	2021.3	2047.8	2057.8	2049.5	2038.4	2007.5	1917.5	1785.5
10°	1859.5	1867.8	1882.7	1892.6	1925.2	1951.7	1985.4	1988.2	1981.6	1895.4	1735.2
12.5°	1741.3	1749.0	1765.6	1785.5	1818.6	1852.9	1903.1	1920.8	1942.9	1881.0	1699.3
15°	1639.7	1641.9	1657.9	1682.8	1726.4	1773.3	1833.0	1858.9	1902.0	1875.5	1671.7
17.5°	1550.8	1551.3	1561.8	1584.5	1637.5	1699.3	1768.9	1803.2	1857.8	1867.8	1647.4
20°	1492.2	1491.7	1492.2	1504.4	1551.3	1624.8	1709.3	1745.2	1815.3	1858.4	1622.6
22.5°	1472.4	1469.6	1456.9	1452.5	1482.3	1546.9	1648.0	1694.9	1777.2	1855.6	1604.4
25°	1496.7	1495.0	1467.9	1442.5	1445.3	1485.6	1585.6	1643.0	1747.4	1865.6	1599.9
27.5°	1575.1	1571.8	1530.3	1480.6	1449.2	1456.3	1539.2	1599.4	1723.6	1889.9	1606.0
30°	1677.8	1678.4	1634.2	1574.0	1500.0	1459.1	1514.3	1571.2	1707.6	1926.3	1619.3
32.5°	1792.1	1791.6	1760.1	1690.5	1596.1	1509.9	1525.4	1573.4	1709.8	1979.9	1644.7
35°	1910.3	1904.2	1893.7	1832.4	1722.0	1598.8	1575.6	1611.0	1733.0	2050.6	1687.7
37.5°	2046.7	2044.5	2055.0	1990.4	1877.7	1729.7	1664.0	1687.7	1791.6	2155.0	1757.3
40°	2263.8	2251.6	2256.6	2168.8	2053.3	1905.9	1787.7	1793.8	1884.9	2293.0	1867.2
42.5°	2677.4	2628.3	2536.0	2371.5	2246.6	2101.4	1949.5	1939.0	2016.9	2460.4	2011.9
45°	3171.7	3115.4	2882.9	2595.1	2439.9	2311.3	2149.4	2121.3	2179.3	2659.7	2198.6
47.5°	3584.2	3523.5	3215.3	2828.7	2636.5	2527.8	2370.9	2337.8	2373.7	2891.1	2422.8
50°	3725.1	3691.4	3420.8	3023.1	2834.8	2770.8	2648.7	2593.5	2602.3	3140.8	2684.6
52.5°	3660.5	3648.9	3467.7	3156.2	3018.2	3039.2	2953.0	2895.0	2885.1	3413.6	2974.0
55°	3524.1	3518.5	3430.2	3230.2	3180.0	3284.9	3379.9	3329.7	3235.8	3703.5	3213.1
57.5°	3329.1	3350.1	3413.6	3372.7	3378.8	3544.5	3776.4	3802.4	3662.1	3934.4	3390.4
60°	2808.3	2864.6	3155.7	3525.7	3809.0	3976.4	4201.1	4249.7	4023.3	4092.3	3595.3
62.5°	2076.0	2156.6	2571.4	3251.2	4045.9	4797.6	4766.1	4744.6	4367.9	4303.9	3968.1
65°	1219.4	1313.9	1664.5	2540.5	3688.6	5325.6	5821.0	5522.7	4893.1	4743.5	4561.8
67.5°	607.5	608.1	766.6	1340.9	2726.0	4957.2	7360.7	7188.4	6009.8	5391.3	4795.9
70°	467.2	479.9	567.2	779.3	1378.5	3860.9	7713.6	8421.1	7132.0	5362.6	4069.1
72.5°	396.0	404.3	504.8	678.2	1030.5	2119.6	6677.5	7443.5	6805.7	4530.8	2999.4
75°	285.0	291.6	446.8	615.2	948.8	1051.5	4580.5	5520.5	5106.3	3187.2	1650.7
77.5°	70.7	70.1	155.7	499.3	848.8	875.9	2628.3	3540.1	2929.8	1305.0	424.1
80°	31.5	30.4	35.3	104.9	789.7	826.8	1155.9	1787.7	1123.9	211.5	129.8
82.5°	22.1	21.0	22.1	38.7	264.0	767.1	698.6	774.8	411.4	72.3	55.2
85°	7.2	6.6	12.1	32.6	74.0	442.4	681.5	578.8	306.0	30.9	37.0
87.5°	1.1	1.1	4.4	17.7	21.5	147.5	399.8	400.9	137.5	18.2	16.6
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°	1851.2	1851.2	1851.2	1851.2	1851.2	1851.2	1851.2	1851.2	1851.2	1851.2	1851.2
2.5°	1823.1	1790.5	1744.6	1698.8	1657.4	1614.8	1580.6	1564.6	1557.4	1547.5	1525.9
5°	1781.1	1722.0	1621.5	1522.6	1430.4	1342.0	1266.4	1223.3	1176.9	1174.7	1152.0
7.5°	1713.7	1629.8	1471.3	1317.7	1176.9	1042.1	926.2	851.1	799.7	767.7	745.6
10°	1638.6	1530.9	1321.0	1105.1	913.5	733.4	584.3	487.1	428.0	398.2	381.1
12.5°	1578.9	1443.6	1173.0	901.3	661.1	454.5	315.9	245.2	213.7	201.6	196.1
15°	1527.6	1363.6	1034.4	719.1	441.3	261.2	182.8	159.6	154.6	154.6	154.1
17.5°	1475.7	1286.2	899.7	540.1	277.8	171.2	144.1	140.8	141.4	143.0	143.0
20°	1426.5	1212.8	769.9	384.9	182.2	137.0	130.9	129.8	131.4	133.6	133.1
22.5°	1386.8	1148.2	648.4	264.5	140.3	124.3	120.4	118.7	119.8	121.5	120.9
25°	1358.6	1092.9	536.8	184.5	122.1	113.2	108.8	106.6	105.5	106.6	106.0
27.5°	1341.5	1046.6	431.9	138.6	109.3	102.2	96.6	92.2	89.5	89.5	88.4
30°	1330.4	1002.9	338.5	114.9	98.9	91.1	83.4	77.3	72.9	71.8	71.2
32.5°	1329.9	965.4	252.9	101.6	88.9	80.1	70.7	63.0	58.0	56.9	56.3
35°	1343.7	935.0	186.1	91.7	80.1	69.6	59.1	50.8	46.4	46.4	45.8
37.5°	1379.6	917.3	140.8	83.9	72.9	60.7	49.7	42.0	38.1	39.2	39.2
40°	1446.4	914.0	114.9	77.9	66.8	53.0	40.3	34.2	32.6	34.2	34.2
42.5°	1548.6	931.7	102.2	73.5	61.3	45.3	33.7	29.3	28.7	30.4	30.4
45°	1681.7	966.5	95.0	69.6	55.2	37.6	28.2	25.4	24.9	27.1	27.1
47.5°	1842.9	1013.4	88.4	65.2	49.2	30.9	23.7	21.5	21.5	23.7	24.3
50°	2034.0	1076.9	81.7	60.7	44.2	26.0	19.9	18.2	18.8	21.0	21.5
52.5°	2253.8	1154.8	75.7	56.9	38.7	21.0	16.6	15.5	16.0	18.2	18.8
55°	2443.3	1222.7	68.5	53.0	31.5	17.1	13.8	13.3	13.8	16.6	16.6
57.5°	2608.4	1287.9	61.9	46.9	24.9	13.8	11.0	11.0	12.1	14.9	15.5
60°	2827.6	1390.6	56.3	39.8	18.8	10.5	8.8	9.4	11.0	13.3	13.8
62.5°	3215.9	1565.1	49.2	33.1	13.8	8.3	7.2	7.7	9.9	12.7	13.3
65°	3701.9	1730.3	40.9	27.6	10.5	6.1	5.5	7.2	9.9	12.7	13.3
67.5°	3652.2	1504.9	32.0	22.1	7.7	5.0	4.4	6.6	9.4	12.7	13.3
70°	2961.8	1054.8	23.7	14.9	6.1	4.4	4.4	6.6	9.4	12.1	12.7
72.5°	2054.5	587.1	18.2	9.9	5.5	4.4	3.9	6.1	8.8	12.1	12.7
75°	977.5	180.0	14.4	7.2	5.0	3.9	3.3	6.1	8.8	12.1	12.7
77.5°	187.8	45.8	11.6	6.1	4.4	3.9	3.3	5.5	8.8	11.6	12.1
80°	63.5	20.4	9.4	5.5	4.4	3.9	3.3	5.5	8.3	11.0	11.6
82.5°	34.8	11.6	8.3	5.0	4.4	3.3	2.8	5.0	7.7	11.0	11.6
85°	27.1	8.3	6.6	5.0	4.4	3.3	2.8	5.0	7.7	10.5	11.0
87.5°	13.8	6.1	5.5	5.0	4.4	3.3	2.8	4.4	7.2	9.9	11.0
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)