

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: P198693

Luminaire Tested: **XNV2-AF-02-LED-U-SL2-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198693
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24258)
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-SL2-800-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8130.4 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

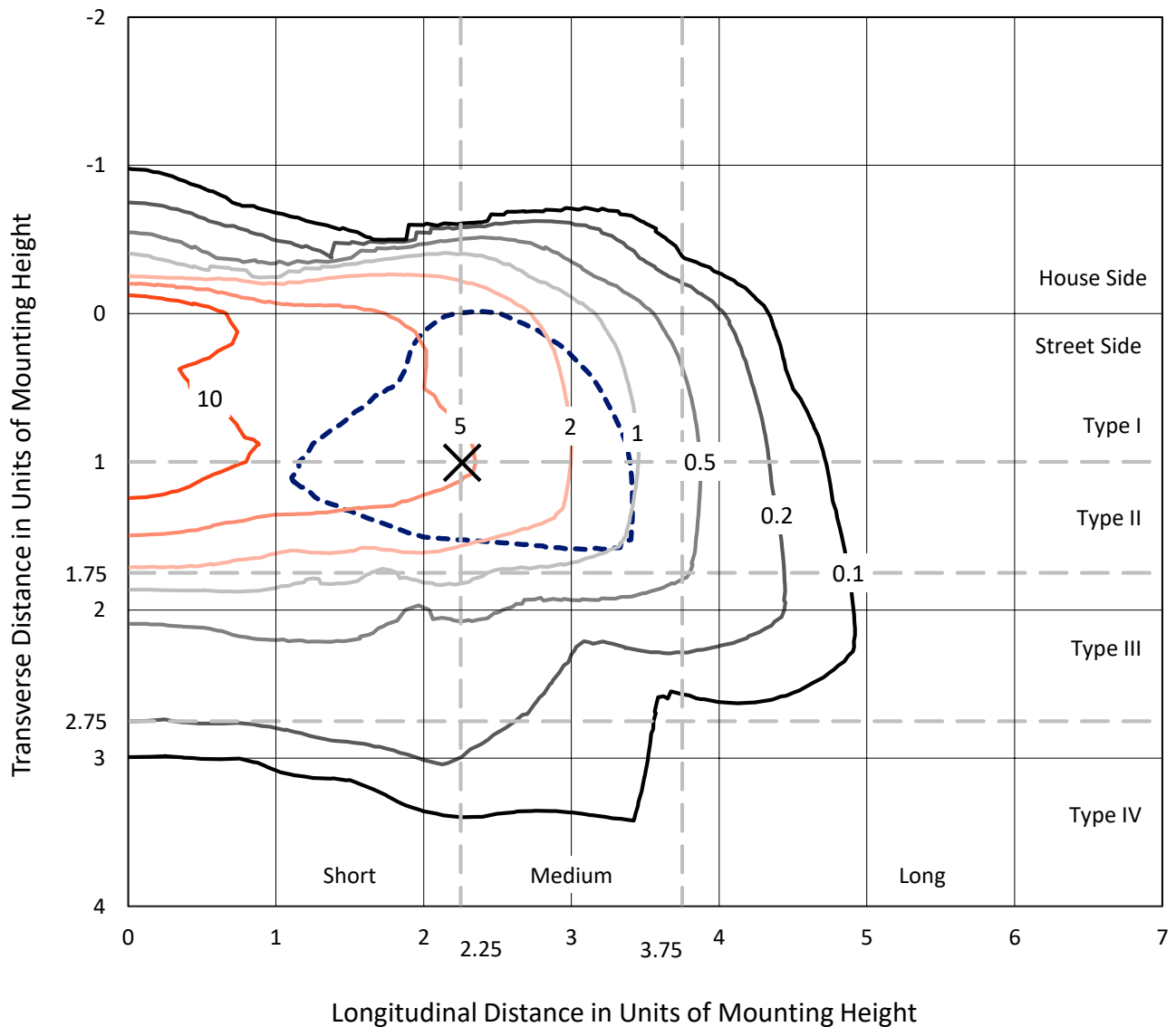
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

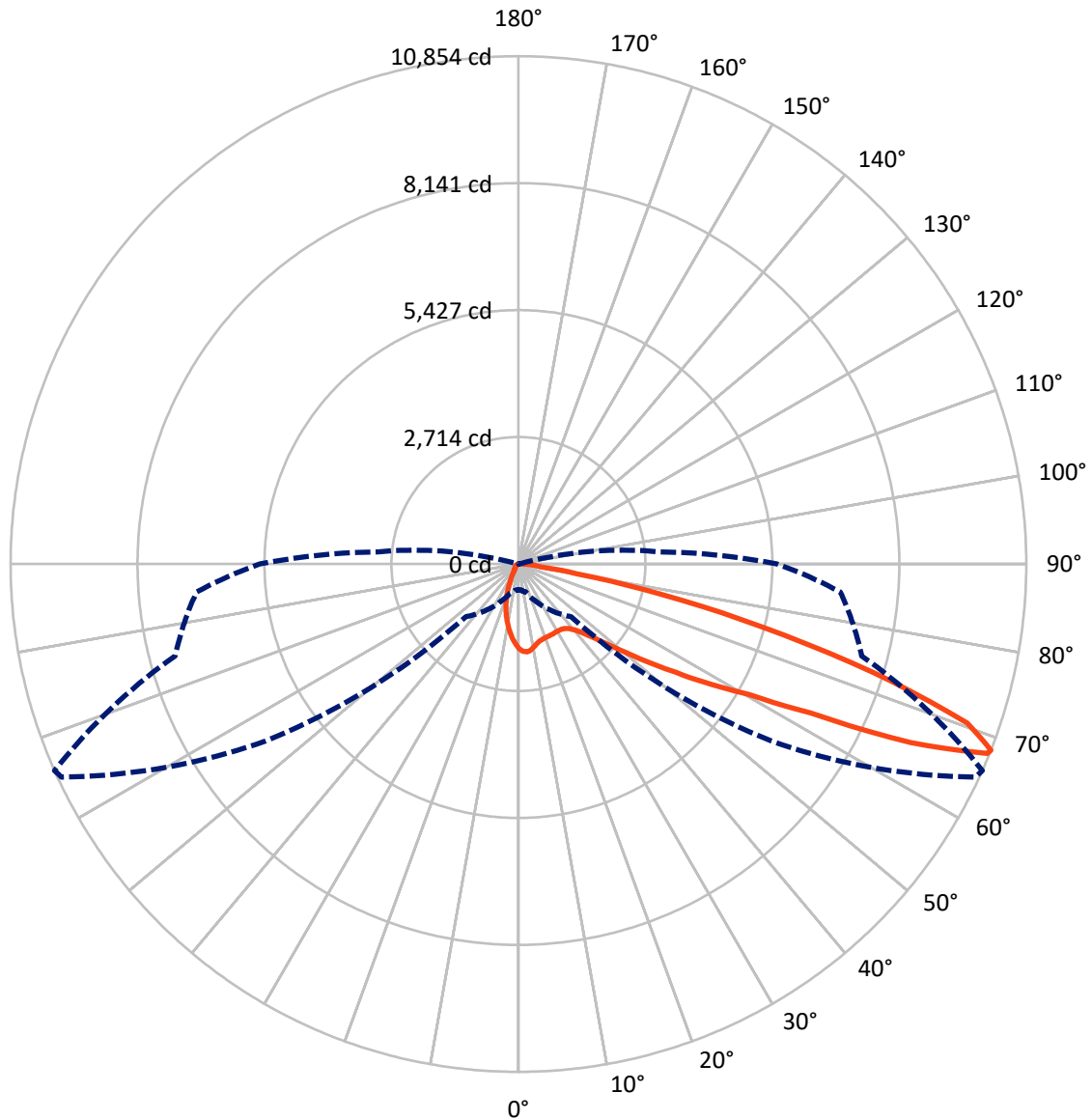
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.1 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	823.5	0.0	823.5
	% Fixture	10.1	0.0	10.1
Street Side	Lumens	7306.9	0.0	7306.9
	% Fixture	89.9	0.0	89.9
Total	Lumens	8130.4	0.0	8130.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.5	1.8
10°-20°	319.5	3.9
20°-30°	463.0	5.7
30°-40°	708.7	8.7
40°-50°	1212.3	14.9
50°-60°	1896.3	23.3
60°-70°	2183.6	26.9
70°-80°	1092.7	13.4
80°-90°	105.8	1.3
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°	8130.4	100.0
0°-180°	8130.4	100.0

Coefficient of Utilization



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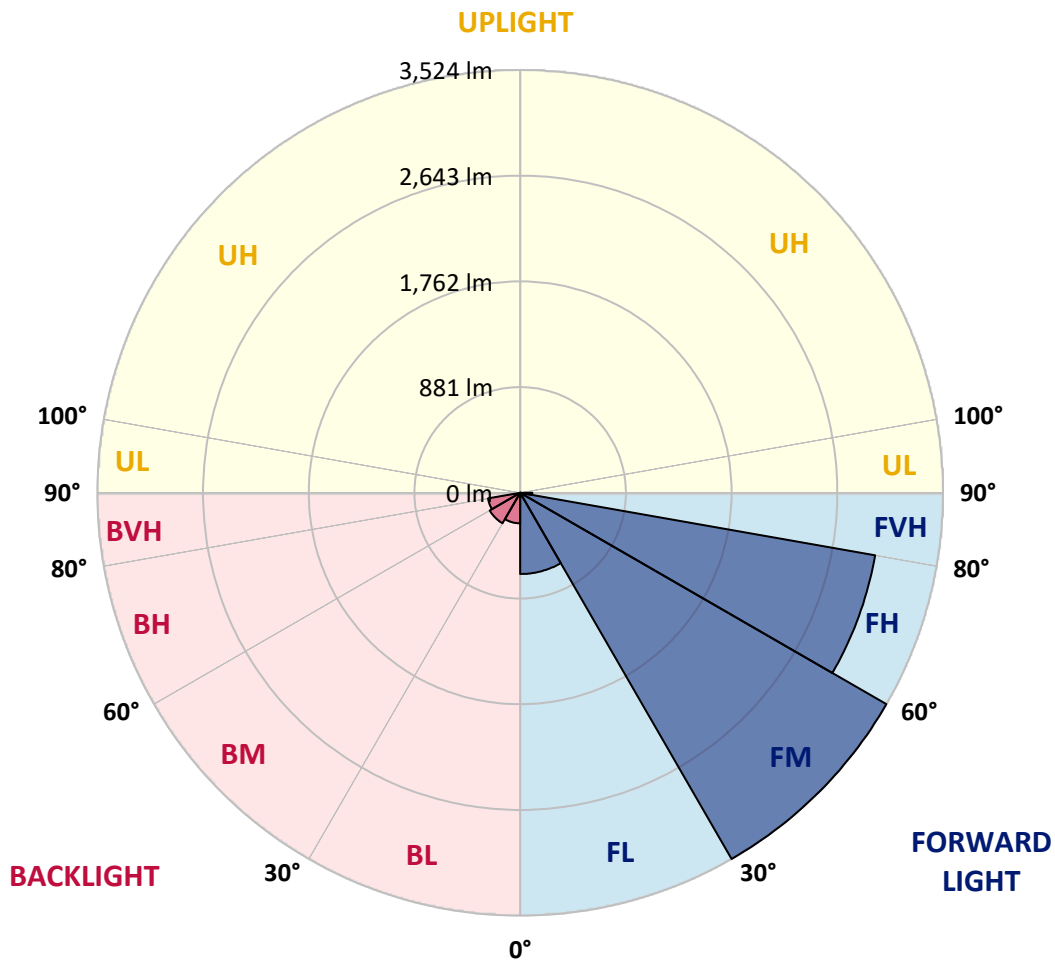
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	676.8	8.3			
FM (30°-60°)	3524.1	43.3			
FH (60°-80°)	3004.2	36.9			G2/5000
FVH (80°-90°)	101.8	1.3			G2/225
BL (0°-30°)	254.2	3.1	B1/500		
BM (30°-60°)	293.2	3.6	B1/1000		
BH (60°-80°)	272.1	3.3	B1/500		G1/500
BVH (80°-90°)	4.0	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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1811.3	1811.3	1811.3	1811.3	1811.3	1811.3	1811.3	1811.3	1811.3	1811.3	1811.3
2.5°	1905.2	1906.5	1905.9	1907.8	1906.5	1896.9	1886.7	1865.0	1866.9	1838.9	1807.6
5°	1771.1	1782.0	1792.8	1803.8	1829.9	1852.9	1880.3	1886.7	1886.7	1862.5	1816.5
7.5°	1634.6	1635.2	1647.4	1662.0	1697.2	1739.2	1803.1	1860.5	1861.8	1868.2	1817.8
10°	1531.9	1535.0	1543.3	1559.3	1594.4	1635.9	1707.3	1797.3	1804.4	1851.5	1805.0
12.5°	1452.1	1455.9	1464.8	1483.3	1515.2	1558.0	1633.3	1736.0	1745.7	1835.6	1801.2
15°	1390.8	1395.9	1402.9	1421.4	1455.9	1501.2	1583.5	1695.2	1706.7	1829.2	1813.3
17.5°	1365.2	1365.2	1364.6	1377.4	1411.9	1457.8	1543.9	1673.5	1688.2	1834.4	1833.7
20°	1376.1	1374.1	1360.7	1357.6	1378.6	1424.6	1512.6	1659.4	1676.1	1844.0	1858.6
22.5°	1433.6	1429.7	1399.7	1374.8	1368.4	1399.1	1491.6	1649.9	1669.7	1863.7	1891.8
25°	1555.4	1543.9	1502.5	1446.2	1395.9	1392.6	1476.9	1644.8	1665.9	1886.7	1928.2
27.5°	1713.7	1710.6	1644.2	1568.8	1471.8	1413.7	1472.4	1640.9	1662.0	1903.3	1957.5
30°	1910.3	1911.6	1835.0	1736.7	1589.9	1473.2	1486.6	1639.1	1660.8	1904.5	1970.3
32.5°	2113.3	2114.5	2050.7	1945.4	1751.4	1575.2	1526.0	1648.0	1667.8	1899.4	1969.7
35°	2308.6	2310.5	2272.2	2187.3	1967.1	1716.9	1600.7	1678.7	1692.7	1902.7	1968.4
37.5°	2555.6	2563.2	2516.0	2436.9	2237.7	1925.0	1722.6	1740.6	1752.0	1928.8	1978.0
40°	2976.9	2966.7	2831.3	2697.3	2531.3	2178.4	1898.8	1847.1	1850.9	1996.5	2014.4
42.5°	3467.7	3454.9	3223.2	2992.1	2833.3	2484.1	2124.2	2010.5	2009.9	2110.0	2093.5
45°	3890.2	3882.5	3638.7	3330.4	3167.7	2821.7	2401.8	2246.0	2238.4	2306.7	2237.7
47.5°	4190.2	4183.8	3999.3	3690.4	3554.4	3193.2	2748.4	2567.1	2551.1	2563.9	2472.0
50°	4219.6	4212.5	4148.1	3949.5	4006.4	3738.3	3176.6	2987.7	2967.3	2947.5	2826.2
52.5°	3945.1	3944.4	3978.3	3965.5	4322.9	4439.7	3701.9	3507.9	3483.7	3433.2	3312.5
55°	3384.0	3380.9	3509.1	3695.5	4315.9	5163.5	4502.9	4127.0	4095.1	3994.2	3836.0
57.5°	2472.6	2456.0	2724.1	3119.2	4012.7	5480.0	5775.0	4896.0	4843.2	4523.4	4279.5
60°	1365.2	1371.6	1716.3	2184.1	3294.7	5417.5	6945.5	5792.9	5653.7	4979.7	4734.0
62.5°	765.3	781.2	1037.8	1419.4	2100.5	4910.2	7573.6	7336.2	7001.1	5512.0	5308.4
65°	578.9	588.5	717.4	1095.3	1324.4	3431.3	7673.8	9494.1	9205.0	6318.8	6223.0
67.5°	545.0	552.7	615.9	908.3	1206.3	1779.4	6919.3	10770.6	10807.0	7419.2	6931.5
68°	548.9	558.4	621.6	873.8	1204.4	1591.8	6597.7	10777.0	10854.2	7596.5	6907.3
70°	504.2	506.8	657.5	857.2	1167.4	1254.1	4772.9	10038.5	10177.0	7807.8	6270.3
72.5°	192.7	193.4	294.9	742.3	1222.9	1261.2	2404.3	7934.2	7941.3	6795.0	4888.4
75°	100.2	84.3	92.6	232.3	1168.0	1229.3	1206.3	5417.5	5383.7	4595.5	2995.3
77.5°	68.9	58.7	61.9	80.4	485.7	1228.7	871.2	3115.3	3108.3	1955.0	854.7
80°	39.0	33.9	37.0	67.6	170.4	1153.4	811.9	1339.0	1261.8	343.4	138.5
82.5°	19.7	16.6	19.7	56.8	106.0	725.7	789.5	525.3	467.8	81.7	90.0
85°	5.1	5.1	9.6	39.6	65.8	238.0	707.8	379.1	340.8	35.7	63.8
87.5°	1.2	0.6	3.8	14.7	23.6	51.7	392.5	211.2	181.9	18.5	37.0
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°	1811.3	1811.3	1811.3	1811.3	1811.3	1811.3	1811.3	1811.3	1811.3	1811.3	1811.3
2.5°	1794.8	1776.9	1741.8	1702.2	1674.2	1643.5	1625.7	1604.0	1587.3	1572.7	1583.5
5°	1788.4	1754.0	1676.1	1588.6	1515.2	1445.0	1392.6	1342.9	1305.3	1281.7	1291.2
7.5°	1771.9	1720.7	1594.4	1457.8	1337.8	1224.8	1132.9	1050.6	986.7	952.3	963.1
10°	1743.7	1671.6	1501.8	1312.2	1144.4	984.8	848.2	725.7	633.1	589.7	600.0
12.5°	1723.3	1628.2	1406.0	1171.9	951.0	724.5	543.2	402.7	330.6	287.2	291.0
15°	1714.4	1594.4	1316.7	1023.8	739.7	465.3	293.6	212.6	187.6	178.7	179.3
17.5°	1715.6	1567.6	1231.8	869.9	526.5	267.4	180.0	162.1	158.3	156.4	156.4
20°	1718.9	1540.8	1143.8	709.7	337.0	172.4	150.0	144.2	142.3	139.7	140.5
22.5°	1728.4	1520.3	1055.1	548.9	207.5	140.5	132.8	127.7	124.5	120.6	121.2
25°	1743.1	1505.0	967.6	395.1	146.2	122.5	115.5	108.5	102.8	98.3	98.9
27.5°	1752.0	1483.3	874.4	269.3	121.2	107.2	97.7	88.1	81.7	77.8	77.2
30°	1745.7	1448.2	768.4	176.8	107.2	92.6	81.0	70.2	63.8	60.7	60.7
32.5°	1728.4	1402.9	651.6	128.9	95.1	79.8	65.8	56.2	51.7	49.8	50.4
35°	1708.6	1355.6	527.2	109.1	85.5	67.6	53.6	45.9	44.1	43.4	43.4
37.5°	1697.8	1314.8	407.9	98.9	76.6	56.2	44.1	39.6	37.6	37.6	37.6
40°	1709.9	1283.5	301.9	91.2	67.6	46.5	37.0	33.9	33.1	33.1	33.1
42.5°	1761.6	1272.7	220.9	84.9	58.7	39.0	31.9	29.4	28.7	29.4	29.4
45°	1862.5	1296.3	167.3	78.5	50.4	31.9	27.4	25.6	25.6	26.2	26.2
47.5°	2033.5	1356.9	137.2	72.1	42.1	26.8	23.6	22.3	22.3	23.0	23.0
50°	2299.0	1469.3	123.2	65.1	35.1	23.0	19.7	19.1	19.1	19.7	20.5
52.5°	2702.4	1683.1	116.2	58.1	28.7	19.1	16.6	16.0	16.6	17.2	17.2
55°	3151.1	1956.9	107.8	51.0	24.2	16.0	13.4	13.4	14.0	15.3	15.3
57.5°	3569.2	2221.1	100.2	42.1	21.1	12.8	10.8	10.8	12.2	13.4	13.4
60°	4010.8	2480.2	90.0	33.9	17.9	10.2	8.9	8.9	10.8	12.2	12.8
62.5°	4556.5	2781.5	76.6	26.8	14.0	7.7	6.3	8.3	10.2	12.2	12.2
65°	5345.4	3156.2	60.0	21.1	10.8	5.7	5.1	7.7	9.6	11.5	12.2
67.5°	5632.0	3108.3	45.3	17.2	8.3	4.5	4.5	7.1	9.6	11.5	11.5
68°	5527.3	3003.7	43.4	16.6	7.7	4.5	4.5	7.1	9.6	11.5	11.5
70°	4816.3	2455.4	35.7	12.8	6.3	3.8	3.8	6.3	9.6	10.8	11.5
72.5°	3606.2	1631.4	30.6	8.3	5.7	3.8	3.2	6.3	8.9	10.8	10.8
75°	2068.6	677.2	26.2	6.3	5.1	3.2	3.2	5.7	8.9	10.8	10.8
77.5°	584.6	158.3	21.1	5.1	4.5	3.2	2.6	5.7	8.3	10.2	10.2
80°	107.2	47.3	16.6	4.5	3.8	3.2	2.6	5.7	8.3	10.2	10.2
82.5°	70.9	22.3	12.2	4.5	3.8	3.2	2.6	5.1	7.7	9.6	9.6
85°	53.0	16.0	7.7	4.5	3.8	3.2	2.6	5.1	7.7	9.6	9.6
87.5°	29.4	7.1	5.7	5.1	4.5	3.2	2.6	4.5	7.1	8.9	8.9
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)