

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: P271328

Luminaire Tested: **XNV2-AF-02-LED-U-SL4-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271328
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24285)
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-SL4-7027-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8535 lumens
Efficiency: N/A
Efficacy: 76.9 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 - G2

Input Watts (W): 111
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

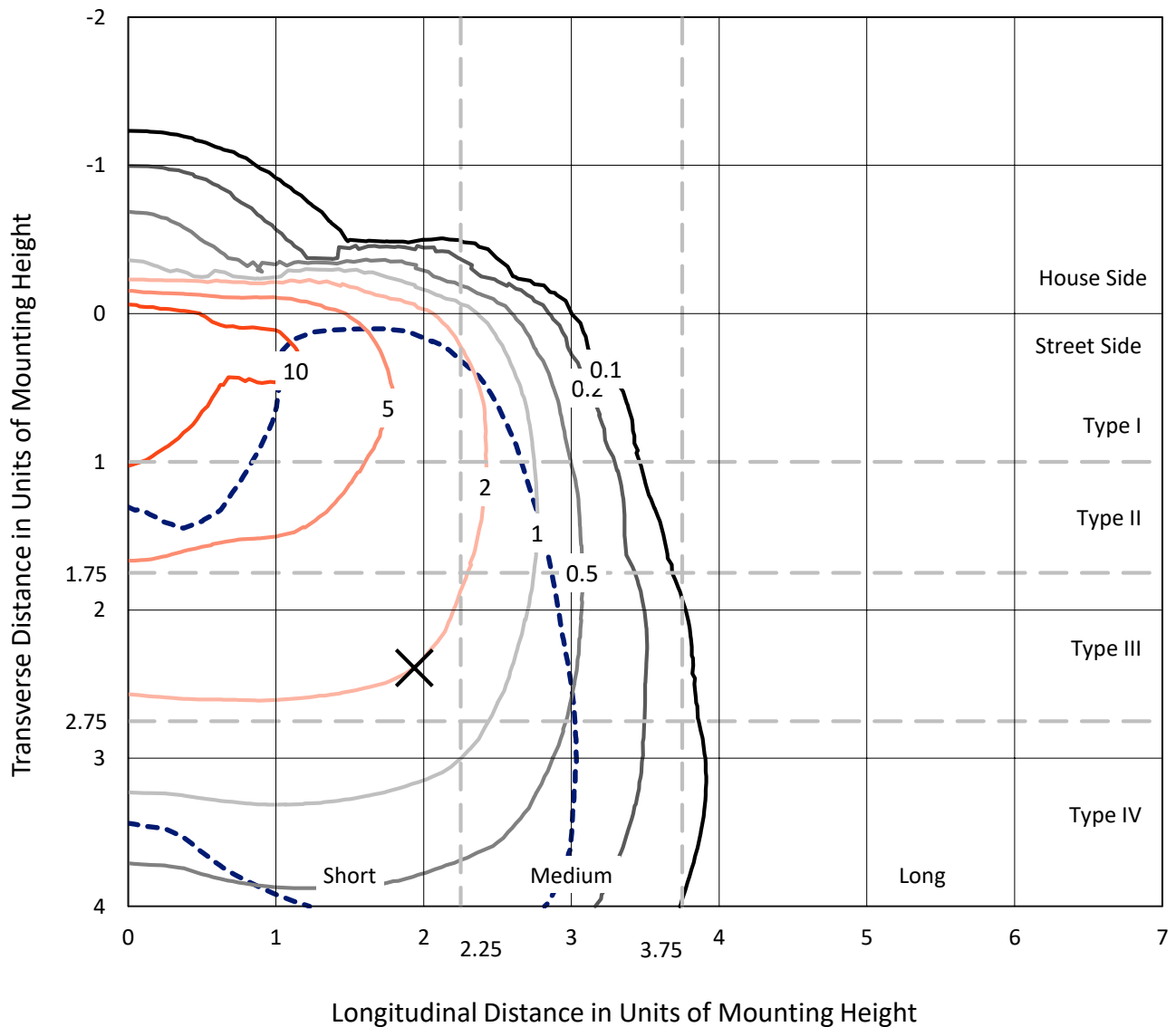


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

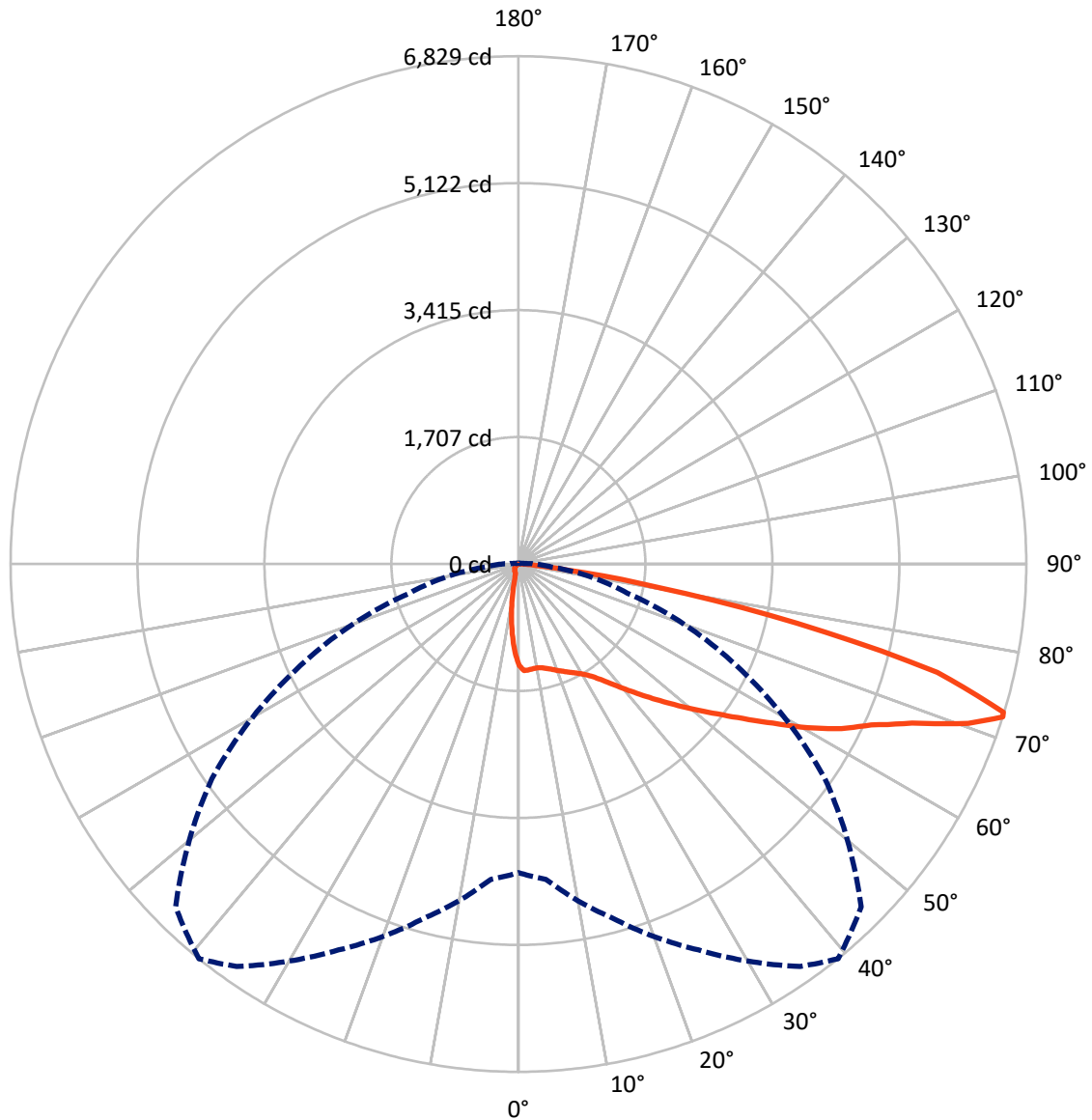


Based on 10 foot mounting height. Maximum calculated value = 14.4 fc
 Type IV - Short - Non-Cutoff

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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	559.4	0.0	559.4
	% Fixture	6.6	0.0	6.6
Street Side	Lumens	7975.6	0.0	7975.6
	% Fixture	93.4	0.0	93.4
Total	Lumens	8535.0	0.0	8535.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.1	1.3
10°-20°	269.0	3.2
20°-30°	446.8	5.2
30°-40°	712.1	8.3
40°-50°	1175.3	13.8
50°-60°	1775.0	20.8
60°-70°	2312.2	27.1
70°-80°	1562.4	18.3
80°-90°	171.1	2.0
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°	8535.0	100.0
0°-180°	8535.0	100.0

Coefficient of Utilization



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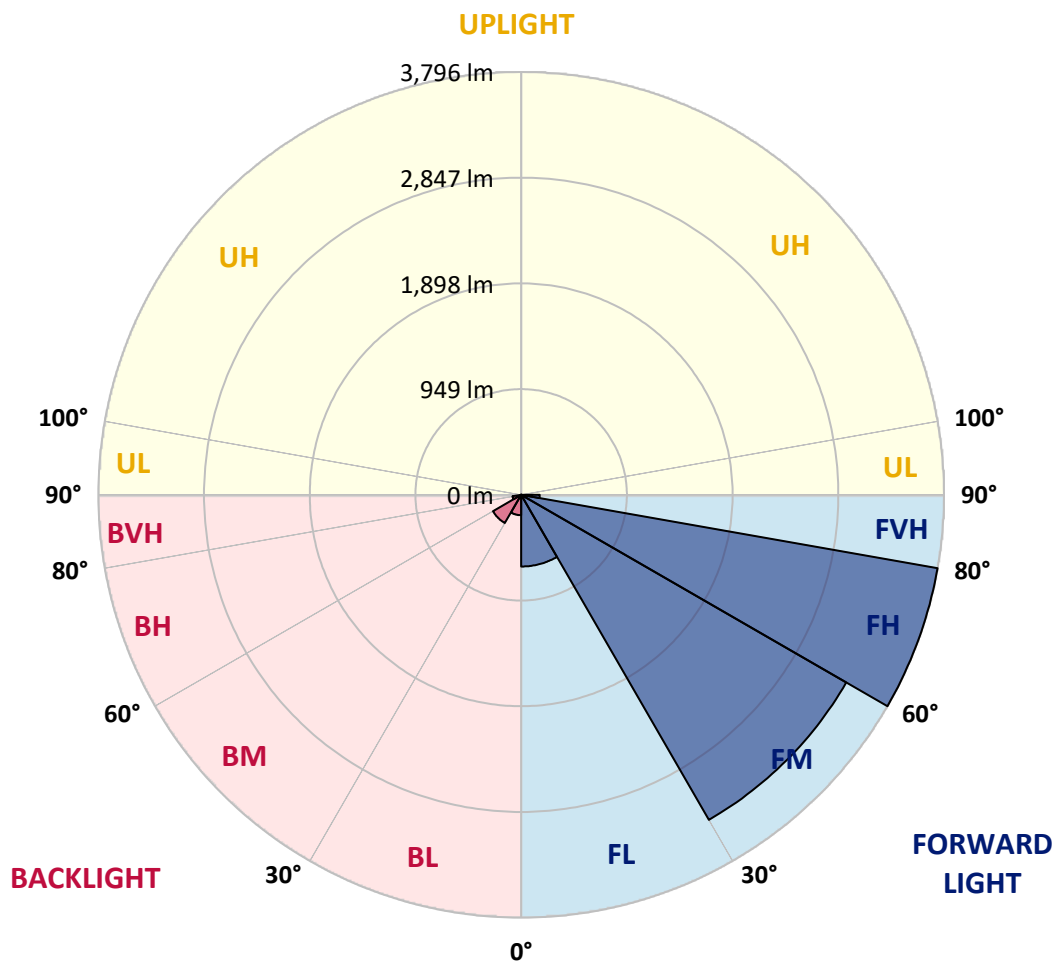
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	643.7	7.5			
FM	(30°-60°)	3369.7	39.5			
FH	(60°-80°)	3796.0	44.5			G2/5000
FVH	(80°-90°)	166.2	1.9			G2/225
BL	(0°-30°)	183.2	2.1	B1/500		
BM	(30°-60°)	292.7	3.4	B1/1000		
BH	(60°-80°)	78.6	0.9	B0/110		G0/110
BVH	(80°-90°)	4.9	0.1			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1366.1	1366.1	1366.1	1366.1	1366.1	1366.1	1366.1	1366.1	1366.1	1366.1	1366.1
2.5°	1454.6	1457.3	1453.9	1448.0	1439.3	1433.9	1426.5	1410.3	1390.2	1372.8	1352.7
5°	1466.0	1467.4	1463.3	1452.0	1438.5	1431.2	1421.7	1404.3	1383.5	1359.3	1323.2
7.5°	1469.4	1468.6	1464.1	1450.0	1429.2	1419.7	1403.6	1382.2	1360.8	1338.6	1297.6
10°	1468.1	1468.1	1464.6	1451.3	1427.8	1419.1	1400.9	1378.2	1351.3	1329.2	1285.6
12.5°	1463.3	1466.0	1464.1	1456.6	1439.3	1432.4	1416.4	1393.6	1368.1	1345.3	1298.9
15°	1469.4	1473.4	1477.4	1474.7	1464.6	1458.7	1443.9	1420.4	1399.6	1375.5	1325.8
17.5°	1493.5	1502.2	1511.7	1512.3	1501.5	1490.8	1474.1	1450.0	1429.8	1407.6	1353.9
20°	1539.2	1546.0	1563.3	1566.7	1545.3	1529.9	1506.3	1478.2	1457.9	1439.3	1380.2
22.5°	1607.0	1614.3	1628.4	1623.7	1587.5	1569.3	1539.9	1507.6	1486.9	1476.2	1410.3
25°	1709.7	1711.6	1715.0	1694.2	1634.5	1614.3	1578.1	1541.9	1525.1	1523.7	1453.3
27.5°	1830.3	1833.1	1818.3	1771.9	1686.7	1660.6	1619.7	1586.9	1578.9	1588.8	1507.6
30°	1968.5	1969.3	1928.3	1853.3	1747.2	1718.4	1676.1	1639.9	1647.2	1672.0	1577.5
32.5°	2110.2	2103.4	2047.1	1949.1	1829.7	1794.9	1758.6	1722.4	1743.8	1794.2	1679.4
35°	2239.7	2237.0	2170.6	2056.5	1937.0	1906.3	1880.1	1841.7	1876.6	1958.6	1818.3
37.5°	2369.2	2367.2	2291.3	2172.6	2069.2	2047.1	2027.7	1998.1	2055.1	2175.2	2004.2
40°	2512.1	2508.7	2415.5	2301.4	2222.9	2210.8	2199.4	2186.7	2283.9	2451.0	2235.6
42.5°	2688.5	2673.7	2547.0	2441.7	2391.9	2395.3	2396.0	2408.7	2561.1	2779.1	2508.7
45°	2891.1	2858.2	2679.1	2591.9	2577.9	2598.0	2618.1	2671.1	2883.7	3156.9	2810.6
47.5°	3087.7	3034.7	2831.5	2753.7	2782.5	2824.1	2872.4	2975.7	3246.1	3552.1	3084.4
50°	3256.9	3202.5	2982.5	2918.1	3010.0	3071.7	3157.5	3313.8	3628.6	3886.2	3256.9
52.5°	3389.8	3346.7	3142.1	3099.2	3262.3	3346.7	3481.7	3687.0	3989.6	4106.3	3377.5
55°	3487.7	3466.2	3295.2	3301.1	3542.6	3664.7	3832.4	4064.7	4294.2	4277.4	3468.1
57.5°	3598.4	3581.6	3455.4	3539.3	3880.1	4037.8	4231.7	4418.3	4515.6	4414.9	3556.7
60°	3711.7	3717.1	3650.1	3827.9	4297.5	4471.9	4641.1	4687.4	4705.4	4554.4	3650.1
62.5°	3797.7	3820.4	3826.5	4139.2	4725.5	4874.6	4947.7	4914.7	4910.8	4741.7	3642.6
65°	3896.3	3956.0	4055.3	4480.7	5114.7	5212.7	5265.1	5312.7	5212.1	4797.4	3284.4
67.5°	4066.6	4160.6	4384.1	4899.4	5564.3	5709.2	5857.5	5807.2	5257.1	4231.7	2502.0
70°	4296.1	4410.9	4805.5	5446.2	6174.2	6417.0	6541.2	5767.6	4463.1	2924.1	1319.8
72°	4151.2	4255.2	4935.6	5725.3	6606.2	6829.1	6518.5	5030.9	3235.3	1515.7	442.1
72.5°	4010.4	4117.7	4894.0	5721.9	6649.3	6819.7	6370.2	4740.4	2863.0	1179.6	304.6
75°	2782.5	2918.1	4195.5	5143.5	6004.5	5817.2	4873.8	2870.4	1037.4	202.7	100.6
77.5°	1438.5	1543.2	2545.0	3634.6	4184.8	3832.4	2880.4	1245.3	287.2	107.3	66.5
80°	891.7	943.4	1190.3	1790.9	2173.9	1901.5	1270.8	503.2	183.9	63.7	53.0
82.5°	461.5	501.3	749.5	722.6	803.2	667.6	469.0	421.3	113.4	39.5	54.3
85°	151.6	161.1	460.3	480.5	343.5	230.9	208.0	401.9	32.9	25.5	46.4
87.5°	20.1	23.4	161.8	275.2	169.2	104.7	124.9	141.6	11.4	14.2	12.8
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°	1366.1	1366.1	1366.1	1366.1	1366.1	1366.1	1366.1	1366.1	1366.1	1366.1	1366.1
2.5°	1339.3	1330.5	1303.0	1275.6	1244.0	1215.0	1192.3	1177.6	1184.2	1162.0	1165.5
5°	1300.9	1278.8	1218.6	1153.3	1082.9	1017.2	964.8	926.0	918.5	885.0	886.4
7.5°	1264.0	1227.9	1129.9	1022.5	905.9	811.2	725.3	650.2	623.3	595.8	579.6
10°	1244.0	1194.2	1055.4	899.2	734.8	595.8	475.1	380.4	340.8	312.0	297.9
12.5°	1250.0	1184.2	999.8	787.0	571.1	394.5	268.4	199.2	175.1	161.8	157.1
15°	1270.2	1186.2	949.4	677.7	415.3	238.9	157.7	134.8	132.9	132.2	131.5
17.5°	1288.9	1188.3	896.4	563.5	277.8	152.4	126.8	124.9	124.9	124.9	124.9
20°	1308.4	1188.9	837.9	444.2	182.4	124.9	119.5	118.0	119.5	119.5	119.5
22.5°	1331.2	1193.7	781.6	328.2	134.8	117.4	114.1	113.4	114.1	114.1	113.4
25°	1359.3	1203.6	720.6	234.8	122.1	112.6	109.4	108.7	109.4	108.7	108.7
27.5°	1397.0	1217.2	649.5	168.4	116.7	108.1	104.7	104.7	104.7	104.1	104.1
30°	1445.3	1233.3	554.3	132.9	111.4	103.3	100.6	100.6	100.0	99.4	99.4
32.5°	1514.4	1259.5	450.2	120.2	105.3	97.2	94.6	95.3	94.6	94.0	93.2
35°	1612.3	1300.3	347.6	113.4	99.4	91.3	88.6	88.6	88.6	87.2	87.2
37.5°	1751.2	1362.6	260.2	106.7	93.2	85.2	81.8	81.8	81.1	79.9	80.5
40°	1923.0	1441.2	188.6	100.6	87.2	78.5	75.7	74.5	73.1	71.8	71.8
42.5°	2129.6	1517.6	141.6	94.6	81.1	73.1	69.8	68.5	65.8	64.4	63.7
45°	2361.1	1599.0	117.4	87.2	74.5	67.2	64.4	61.8	58.4	56.4	55.7
47.5°	2556.3	1648.6	104.7	79.9	67.7	61.1	58.4	54.3	50.3	49.0	49.0
50°	2673.7	1627.8	94.0	72.5	61.1	55.1	51.7	46.4	43.6	42.3	41.6
52.5°	2739.6	1566.0	85.2	66.5	55.1	48.2	43.6	38.8	37.5	36.2	36.2
55°	2784.4	1476.8	75.7	60.4	49.6	42.3	36.9	33.5	32.2	31.5	30.8
57.5°	2827.4	1368.1	67.2	55.1	44.2	37.5	31.5	30.3	27.5	26.8	26.8
60°	2840.3	1218.6	59.1	49.0	39.5	32.9	27.5	25.5	22.7	22.2	22.2
62.5°	2677.8	969.5	52.3	41.6	34.9	28.1	24.2	21.5	18.8	18.8	18.8
65°	2237.7	658.2	44.9	36.2	30.8	24.2	20.8	17.4	16.1	16.1	16.1
67.5°	1558.6	367.0	38.3	30.8	26.2	20.1	17.4	14.7	14.2	14.7	14.7
70°	702.6	145.5	32.2	25.5	21.5	16.8	14.7	12.8	14.2	14.2	14.2
72°	210.7	77.9	26.8	20.8	17.4	14.7	12.8	12.0	13.5	14.2	14.2
72.5°	156.3	69.8	25.5	20.1	17.4	14.2	12.0	12.0	13.5	14.2	14.2
75°	80.5	47.6	19.5	14.7	12.8	11.4	10.2	11.4	13.5	13.5	13.5
77.5°	63.2	38.8	16.1	11.4	10.7	10.2	9.4	10.7	12.0	12.0	12.0
80°	59.1	25.5	12.8	10.7	9.4	8.8	8.8	9.4	10.7	11.4	11.4
82.5°	59.6	20.8	11.4	10.2	8.8	8.1	8.1	8.8	10.2	10.7	10.7
85°	38.3	14.2	10.2	8.8	8.1	7.4	7.4	8.1	9.4	10.2	10.2
87.5°	12.8	10.7	8.8	8.1	6.6	6.6	6.6	6.6	8.1	8.8	9.4
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)