

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: P199215

Luminaire Tested: **XNV2-AF-02-LED-U-SL4-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199215
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-SL4-8030
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 1050mA 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: 9387 lumens
Efficiency: N/A
Efficacy: 84.6 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

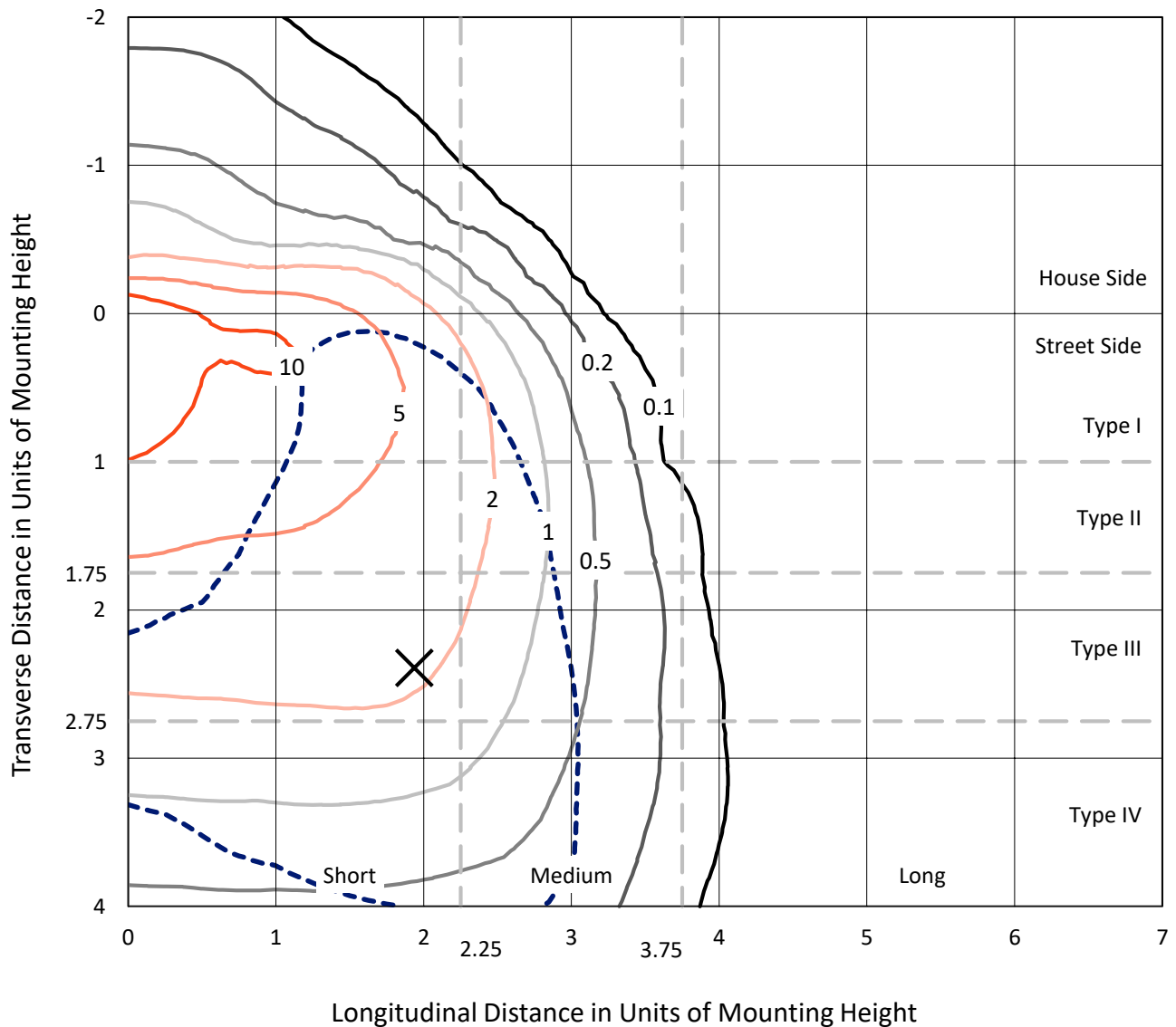
Input Watts (W): 111
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

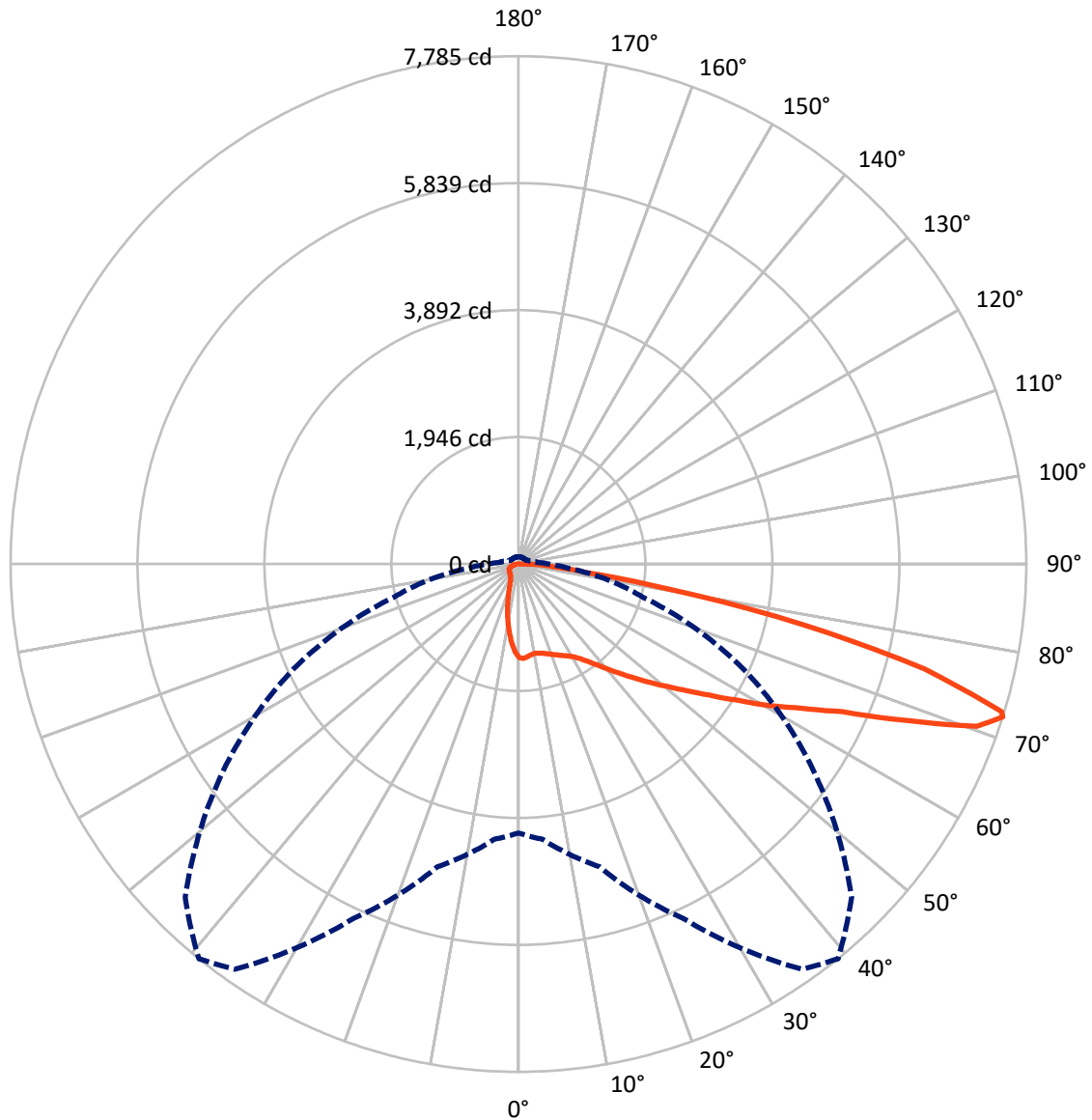
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.3 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	1076.3	0.0	1076.3
	% Fixture	11.5	0.0	11.5
Street Side	Lumens	8310.7	0.0	8310.7
	% Fixture	88.5	0.0	88.5
Total	Lumens	9387.0	0.0	9387.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.2	1.3
10°-20°	309.6	3.3
20°-30°	482.4	5.1
30°-40°	742.8	7.9
40°-50°	1210.9	12.9
50°-60°	1881.6	20.0
60°-70°	2518.4	26.8
70°-80°	1811.1	19.3
80°-90°	307.0	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°	9387.0	100.0
0°-180°	9387.0	100.0



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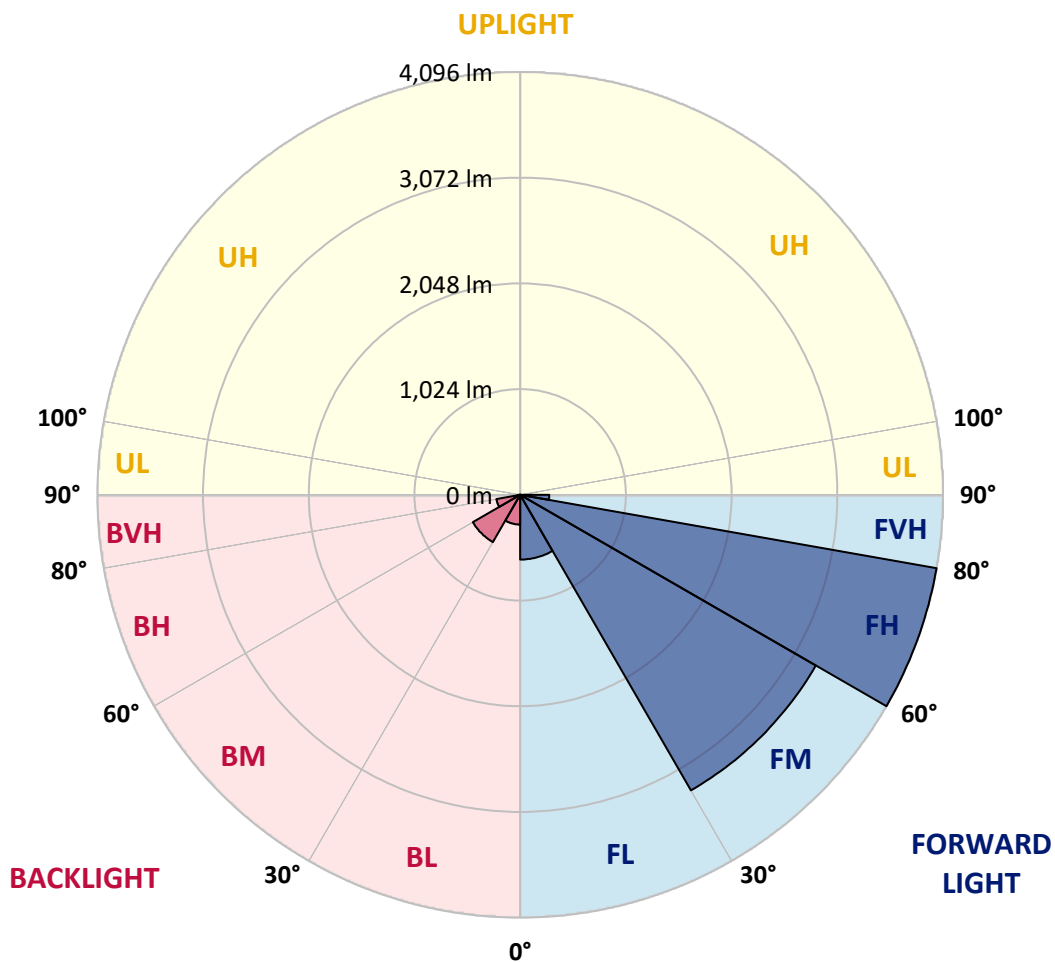
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	627.0	6.7			
FM	(30°-60°)	3306.3	35.2			
FH	(60°-80°)	4095.7	43.6			G2/5000
FVH	(80°-90°)	281.6	3.0			G3/500
BL	(0°-30°)	288.1	3.1	B1/500		
BM	(30°-60°)	529.0	5.6	B1/1000		
BH	(60°-80°)	233.9	2.5	B1/500		G1/500
BVH	(80°-90°)	25.4	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°	1433.6	1433.6	1433.6	1433.6	1433.6	1433.6	1433.6	1433.6	1433.6	1433.6	1433.6
2.5°	1464.4	1465.1	1463.2	1457.5	1452.5	1449.9	1445.5	1438.0	1427.9	1421.0	1415.3
5°	1450.6	1452.5	1451.2	1441.8	1432.9	1427.9	1421.0	1410.2	1397.0	1391.3	1378.1
7.5°	1439.9	1441.1	1437.3	1426.6	1409.6	1403.3	1390.7	1376.9	1364.9	1356.7	1340.9
10°	1432.3	1433.6	1430.4	1419.7	1400.8	1393.2	1378.1	1363.0	1347.2	1337.2	1319.5
12.5°	1421.6	1424.1	1424.1	1419.1	1406.5	1401.4	1386.3	1369.9	1355.4	1344.7	1322.7
15°	1419.7	1422.9	1428.5	1427.9	1424.1	1420.3	1408.4	1392.0	1379.4	1366.8	1339.7
17.5°	1435.5	1442.4	1453.7	1457.5	1455.0	1446.8	1432.9	1417.8	1403.9	1392.0	1358.6
20°	1475.2	1478.9	1495.9	1503.5	1490.9	1478.9	1460.7	1441.1	1428.5	1419.1	1376.2
22.5°	1535.0	1540.1	1553.9	1554.5	1528.1	1513.6	1490.3	1466.3	1454.4	1450.6	1400.2
25°	1630.8	1629.5	1633.3	1617.6	1569.7	1552.7	1524.3	1496.6	1488.4	1495.9	1435.5
27.5°	1745.5	1742.3	1730.4	1689.4	1616.9	1594.9	1560.9	1536.3	1536.3	1553.9	1483.3
30°	1877.8	1874.7	1835.6	1766.9	1673.0	1647.8	1611.9	1586.1	1599.3	1633.3	1548.2
32.5°	2017.7	2006.4	1951.5	1859.5	1753.0	1725.3	1690.7	1664.2	1689.4	1747.4	1641.5
35°	2149.4	2143.1	2075.7	1966.7	1856.4	1833.1	1809.1	1776.4	1816.7	1906.8	1773.2
37.5°	2285.5	2280.5	2197.9	2082.0	1982.4	1966.7	1946.5	1923.8	1988.7	2107.2	1951.5
40°	2437.4	2427.3	2323.3	2207.4	2129.2	2121.7	2111.0	2104.7	2209.3	2385.7	2177.1
42.5°	2609.4	2589.9	2455.6	2345.4	2289.3	2295.6	2289.9	2315.1	2475.2	2707.1	2445.6
45°	2806.0	2766.9	2587.3	2492.2	2466.4	2491.6	2503.5	2567.8	2789.6	3078.2	2745.5
47.5°	2990.0	2939.6	2731.6	2651.6	2666.1	2709.6	2743.6	2857.0	3134.3	3445.0	3051.8
50°	3159.5	3102.8	2886.0	2816.7	2887.3	2949.0	3019.6	3179.7	3501.0	3822.4	3332.8
52.5°	3284.9	3243.9	3040.4	2996.9	3141.2	3223.2	3335.9	3538.2	3871.6	4182.2	3583.6
55°	3381.9	3359.9	3191.0	3203.6	3428.6	3545.8	3682.5	3915.0	4263.5	4504.9	3785.2
57.5°	3494.1	3477.7	3363.0	3453.2	3785.2	3932.7	4094.0	4352.4	4636.6	4789.0	3943.4
60°	3612.6	3612.6	3554.6	3753.7	4231.4	4400.3	4560.9	4762.0	5008.3	5044.9	4007.7
62.5°	3702.1	3725.4	3746.2	4073.8	4654.8	4864.7	5041.1	5233.9	5393.3	5170.9	3856.4
65°	3831.9	3881.6	3998.9	4443.7	5179.1	5453.8	5692.0	5854.0	5705.3	5070.7	3363.0
67.5°	4054.9	4128.7	4378.2	4994.5	5981.9	6393.4	6624.6	6344.9	5644.1	4440.0	2576.0
70°	4256.0	4359.9	4786.5	5693.3	7025.4	7452.6	7346.1	6230.8	4915.7	3254.7	1584.8
72°	4122.4	4235.8	4805.4	5997.7	7583.1	7784.7	7223.3	5521.9	3798.5	1986.2	781.4
72.5°	4034.8	4152.6	4744.3	5990.1	7598.2	7742.5	7052.5	5240.2	3448.1	1737.9	632.0
75°	3370.6	3471.4	4079.5	5308.9	6695.8	6431.2	5503.6	3391.4	1584.8	561.5	325.2
77.5°	2201.1	2277.9	2812.9	3678.1	4690.1	4435.5	3349.8	1587.9	594.2	340.9	244.5
80°	1105.9	1160.7	1505.4	1933.9	2531.3	2329.0	1546.4	768.1	397.6	246.4	192.2
82.5°	769.4	819.8	1036.6	987.4	1058.0	1024.0	727.2	640.9	297.4	155.6	100.8
85°	645.3	697.6	857.6	703.9	575.9	524.9	521.1	605.6	196.6	76.9	85.1
87.5°	562.7	642.1	707.6	514.2	395.1	348.5	383.8	555.2	62.4	42.2	25.8
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°	1433.6	1433.6	1433.6	1433.6	1433.6	1433.6	1433.6	1433.6	1433.6	1433.6	1433.6
2.5°	1405.8	1403.9	1394.5	1380.0	1369.3	1362.4	1349.1	1348.5	1349.8	1338.4	1342.8
5°	1366.1	1358.6	1334.0	1300.6	1273.5	1247.7	1219.3	1209.9	1201.7	1184.7	1186.5
7.5°	1324.5	1311.3	1268.5	1213.6	1161.3	1113.5	1066.2	1042.9	1025.2	1003.2	1003.2
10°	1300.0	1279.2	1213.6	1133.6	1050.4	980.5	909.9	867.7	836.8	808.5	806.6
12.5°	1298.7	1267.2	1175.8	1065.6	951.5	853.2	756.8	691.9	645.9	612.5	609.3
15°	1308.8	1264.7	1144.3	1001.9	858.2	730.3	611.2	528.7	470.1	432.9	429.1
17.5°	1317.6	1261.5	1110.3	935.1	767.5	611.9	479.5	393.8	338.4	308.1	305.0
20°	1325.8	1254.6	1066.8	864.5	667.3	501.0	374.9	305.6	269.1	252.1	250.2
22.5°	1337.8	1248.3	1021.5	785.2	569.0	407.7	309.4	259.6	240.1	231.9	230.6
25°	1357.3	1248.9	977.3	703.9	478.9	339.6	267.8	236.9	226.2	220.5	220.5
27.5°	1385.7	1256.5	933.9	621.3	402.7	293.0	243.2	225.0	218.0	213.6	212.4
30°	1427.3	1270.4	887.9	543.2	342.2	260.9	228.7	217.4	211.7	207.9	207.3
32.5°	1487.8	1294.9	839.3	472.0	296.2	238.2	218.0	211.1	206.7	203.5	202.9
35°	1577.9	1338.4	792.1	411.5	263.4	221.8	209.2	203.5	201.0	199.8	199.1
37.5°	1710.2	1408.4	747.3	364.2	242.0	211.1	200.4	197.2	196.0	196.0	196.0
40°	1876.6	1500.4	707.0	330.8	230.0	202.9	194.1	191.6	191.6	192.2	192.2
42.5°	2078.8	1615.7	672.4	308.1	223.1	197.2	189.7	188.4	187.8	187.8	188.4
45°	2313.9	1751.8	650.9	290.5	218.0	194.1	186.5	185.9	183.4	182.1	182.1
47.5°	2550.2	1897.3	649.7	280.4	211.7	190.3	183.4	183.4	178.3	175.8	176.4
50°	2770.7	2027.8	663.5	277.9	207.9	184.6	180.2	180.8	173.9	170.8	170.1
52.5°	2948.4	2127.3	680.5	281.0	207.9	179.6	174.5	177.7	170.1	166.4	165.7
55°	3085.8	2196.7	686.9	288.0	210.5	175.2	169.5	174.5	168.9	163.8	163.8
57.5°	3184.1	2218.7	659.8	291.1	214.2	174.5	164.5	173.9	170.8	164.5	164.5
60°	3148.2	2090.8	558.9	279.2	213.6	173.3	160.7	175.2	177.1	170.1	170.1
62.5°	2867.8	1749.3	448.7	252.1	202.9	168.9	156.3	173.9	181.5	179.0	177.7
65°	2334.7	1283.0	347.8	219.9	184.6	159.4	146.8	162.6	171.4	173.9	174.5
67.5°	1645.3	812.2	270.3	187.2	161.9	145.6	136.1	143.7	146.8	148.1	150.6
70°	899.8	439.8	214.9	157.5	138.6	131.7	124.8	125.4	124.1	122.9	124.1
72°	451.8	287.3	181.5	136.7	122.9	118.5	115.3	113.4	113.4	111.5	112.2
72.5°	388.8	267.2	175.2	131.7	119.1	115.3	112.8	110.9	110.3	109.0	109.6
75°	259.0	211.7	146.2	110.3	101.5	98.9	100.2	98.3	98.9	97.7	98.3
77.5°	209.2	182.1	124.1	93.3	87.0	83.2	85.7	86.3	87.6	86.3	85.7
80°	175.2	155.0	104.0	76.9	72.5	69.3	70.6	75.0	75.6	71.8	71.2
82.5°	113.4	124.8	81.9	59.9	55.5	54.2	57.3	61.8	63.0	58.0	56.7
85°	95.2	100.2	59.2	41.0	36.5	35.3	41.6	46.0	49.2	44.1	42.8
87.5°	26.5	49.2	29.0	19.5	16.4	16.4	20.2	23.9	28.4	29.0	29.0
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)