

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: P198668

Luminaire Tested: **XNV-AF-01-LED-U-AFL-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198668
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24283)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV-AF-01-LED-U-AFL-800-HSS
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4196.2 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G0

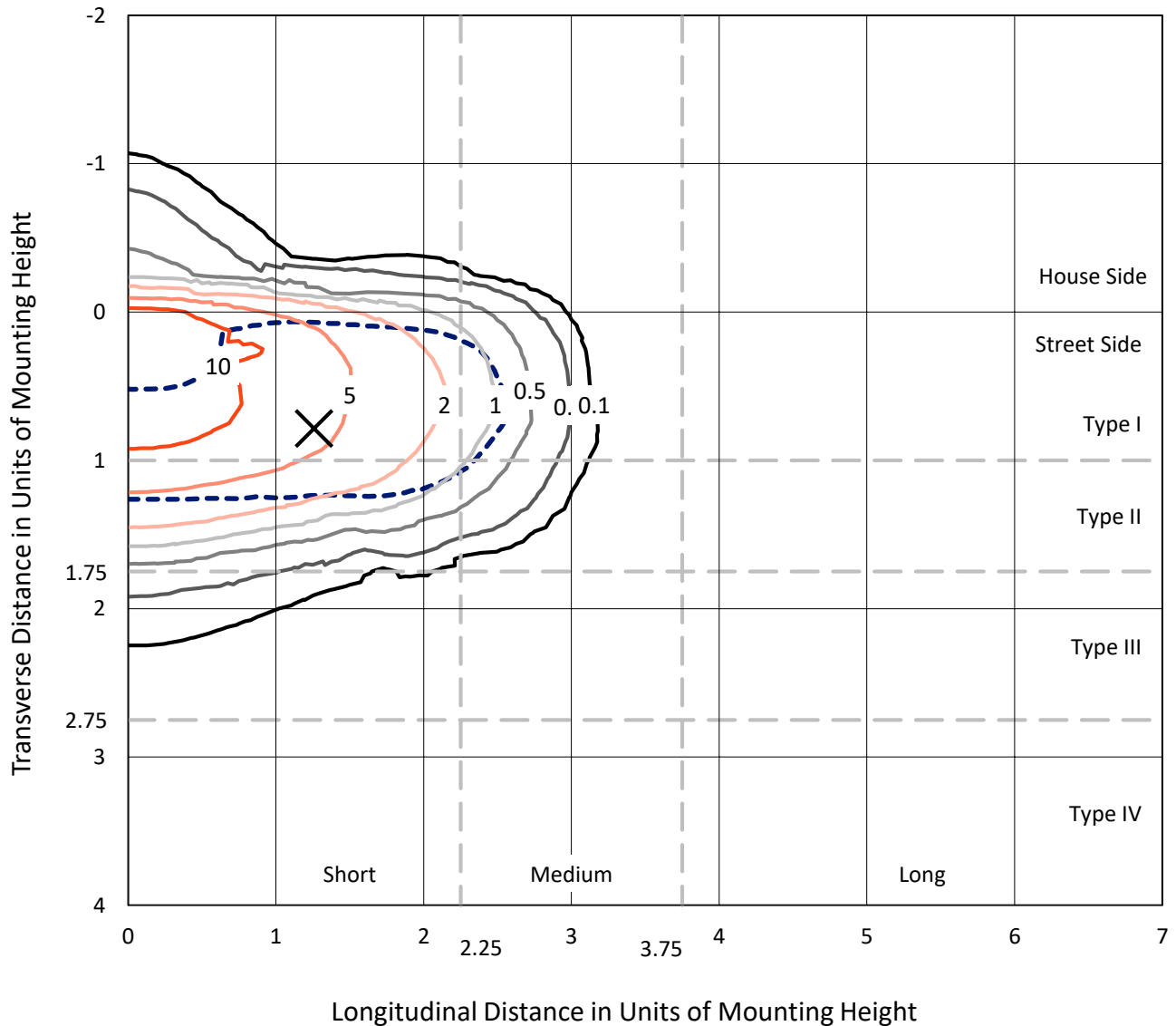
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

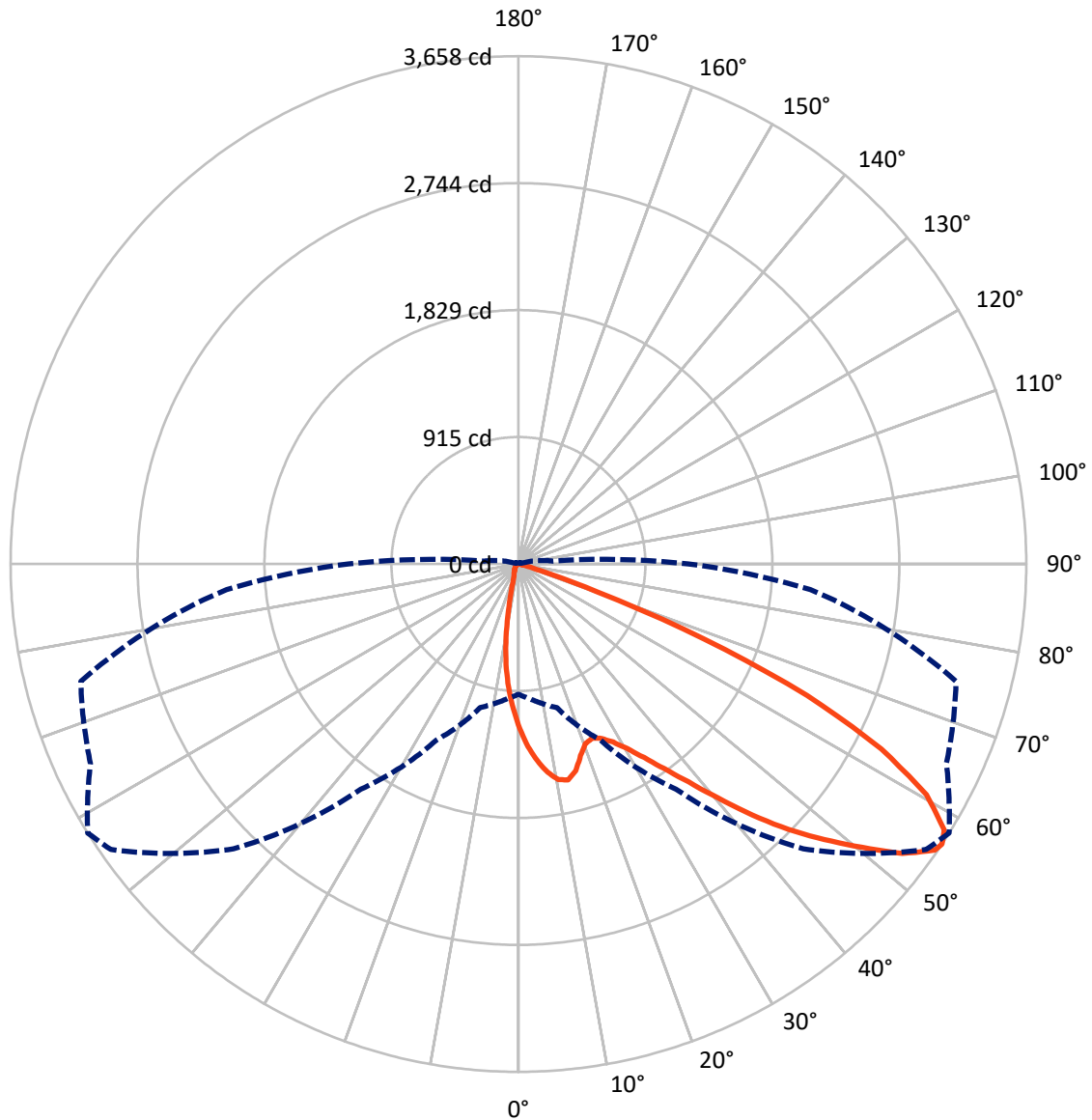
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.8 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 56-Deg Vertical

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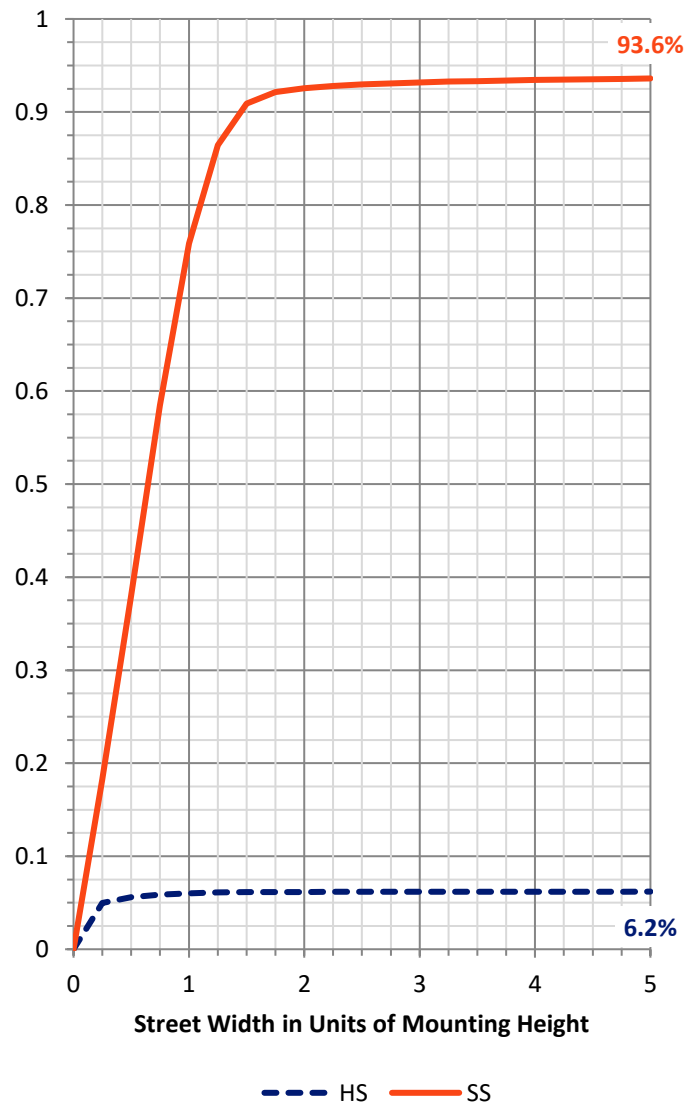
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	261.9	0.0	261.9
	% Fixture	6.2	0.0	6.2
Street Side	Lumens	3934.2	0.0	3934.2
	% Fixture	93.8	0.0	93.8
Total	Lumens	4196.2	0.0	4196.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.3	2.4
10°-20°	235.8	5.6
20°-30°	396.8	9.5
30°-40°	679.5	16.2
40°-50°	1025.4	24.4
50°-60°	1065.8	25.4
60°-70°	598.3	14.3
70°-80°	82.0	2.0
80°-90°	11.1	0.3
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°	4196.2	100.0
0°-180°	4196.2	100.0

Coefficient of Utilization



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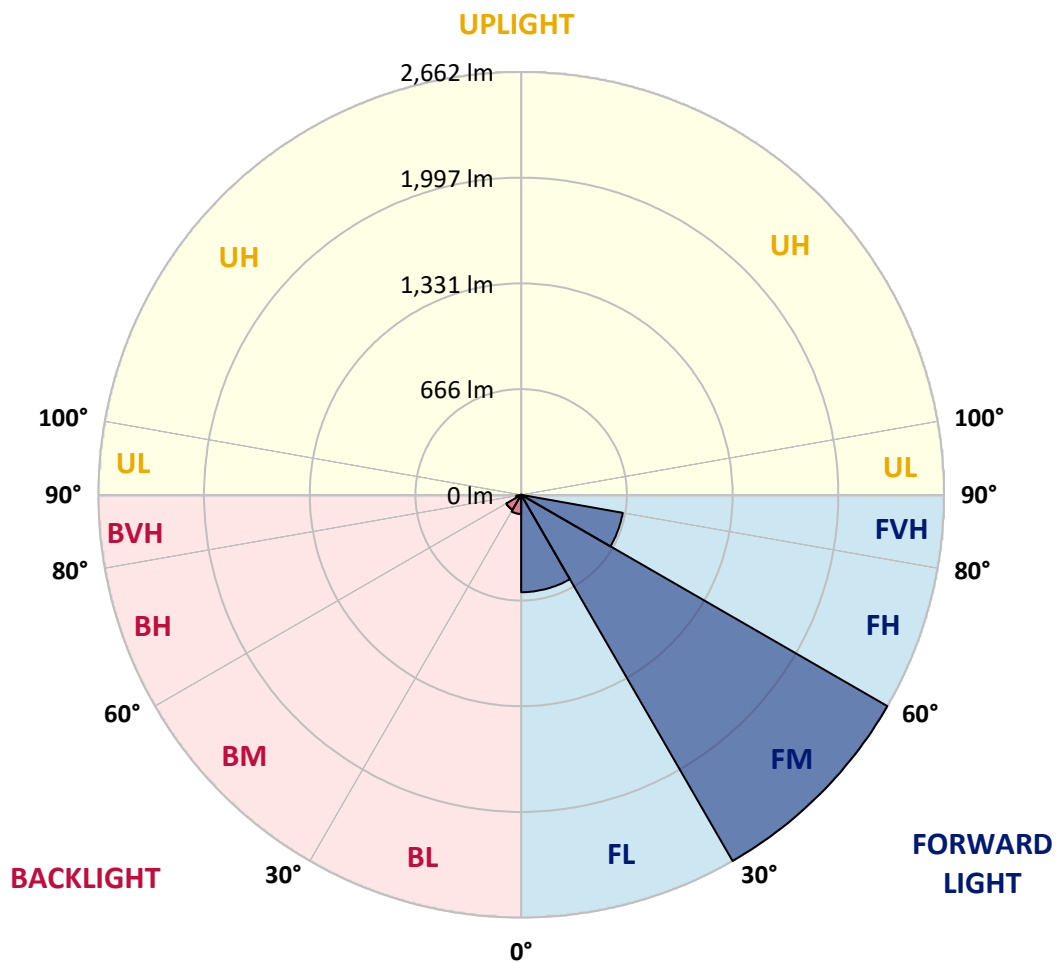
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	613.2	14.6			
FM	(30°-60°)	2662.2	63.4			
FH	(60°-80°)	649.3	15.5			G0/660
FVH	(80°-90°)	9.6	0.2			G0/10
BL	(0°-30°)	120.8	2.9	B1/500		
BM	(30°-60°)	108.5	2.6	B0/220		
BH	(60°-80°)	31.1	0.7	B0/110		G0/110
BVH	(80°-90°)	1.5	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-G0

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1
2.5°	1429.5	1420.8	1411.9	1395.2	1379.9	1356.1	1323.5	1315.5	1289.8	1247.6	1208.2
5°	1552.7	1551.1	1545.1	1531.6	1514.9	1486.1	1449.3	1424.7	1385.0	1318.4	1242.5
7.5°	1479.7	1493.2	1515.2	1546.6	1567.8	1564.9	1536.7	1515.2	1475.9	1385.0	1276.1
10°	1247.3	1249.8	1280.2	1346.2	1450.5	1547.9	1584.8	1578.9	1542.8	1443.2	1305.6
12.5°	1165.3	1166.9	1173.9	1195.1	1262.9	1398.7	1565.5	1595.6	1592.7	1498.9	1336.9
15°	1171.7	1172.7	1174.7	1181.3	1200.5	1268.8	1468.1	1544.7	1624.8	1551.7	1367.7
17.5°	1222.3	1221.7	1215.6	1209.2	1215.3	1237.7	1368.9	1449.6	1618.0	1596.2	1393.0
20°	1320.9	1324.1	1303.6	1275.1	1260.4	1261.4	1319.9	1380.5	1580.3	1630.8	1411.9
22.5°	1459.5	1461.8	1428.1	1378.8	1335.7	1313.9	1330.2	1362.3	1536.7	1662.8	1427.2
25°	1625.1	1625.1	1578.0	1507.8	1440.9	1393.3	1379.1	1391.3	1520.0	1699.0	1442.6
27.5°	1803.7	1810.1	1748.6	1656.8	1568.4	1498.6	1454.4	1452.2	1532.9	1744.4	1459.9
30°	1998.0	2003.8	1930.8	1818.4	1713.7	1624.4	1556.5	1541.8	1581.8	1805.6	1485.1
32.5°	2191.4	2196.2	2115.5	2000.9	1879.0	1773.9	1684.6	1661.3	1669.9	1894.9	1522.3
35°	2437.3	2438.2	2336.1	2199.8	2069.4	1946.2	1833.1	1810.1	1800.5	2007.6	1575.8
37.5°	2632.9	2625.2	2560.5	2431.5	2282.0	2153.3	2020.4	1990.4	1967.2	2166.1	1658.7
40°	2679.0	2679.0	2669.4	2630.6	2511.9	2388.0	2259.3	2214.5	2163.5	2352.8	1770.1
42.5°	2558.9	2566.6	2630.0	2714.2	2715.1	2635.7	2509.9	2472.2	2382.6	2565.4	1891.7
45°	2290.3	2292.5	2444.6	2671.9	2826.2	2871.7	2778.8	2726.7	2602.5	2786.2	2003.1
47.5°	2193.6	2200.7	2265.3	2543.3	2834.6	3062.8	3036.9	2965.1	2806.1	2987.9	2107.2
50°	2045.1	2053.7	2132.8	2353.7	2759.6	3185.5	3283.7	3206.8	2991.4	3156.0	2158.7
52.5°	1689.7	1703.2	1814.9	2103.0	2572.3	3190.6	3509.7	3463.6	3181.3	3245.9	2152.7
55°	1162.8	1172.7	1303.0	1641.7	2194.6	3034.0	3607.0	3638.7	3350.7	3266.1	2123.2
56°	938.0	975.2	1070.5	1398.7	1979.4	2900.8	3584.6	3658.0	3400.9	3262.9	2110.3
57.5°	620.1	627.2	731.2	1013.5	1589.6	2611.7	3483.5	3616.9	3465.6	3246.5	2101.1
60°	291.6	294.8	332.4	467.7	860.2	1903.3	3154.7	3376.2	3489.3	3212.4	2100.8
62.5°	190.2	190.8	195.3	223.1	351.8	1036.7	2615.3	2934.1	3293.0	3208.5	2094.7
65°	156.5	158.1	152.7	156.2	184.1	390.9	1844.7	2287.4	2832.3	3118.2	2026.2
67.5°	138.0	138.3	130.9	126.7	134.8	171.5	929.4	1442.9	2118.4	2649.5	1668.9
70°	125.8	125.5	117.1	107.6	107.9	114.0	302.9	599.3	1172.1	1573.2	958.2
72.5°	111.7	112.3	107.6	94.1	89.6	80.7	114.0	161.6	399.0	505.2	252.6
75°	98.0	96.7	91.9	83.3	74.9	54.1	57.3	68.8	104.0	103.1	54.4
77.5°	74.3	73.0	75.2	71.1	58.6	37.7	31.4	35.9	47.1	43.9	22.1
80°	56.7	56.1	51.2	60.9	53.5	28.5	21.5	22.1	25.6	23.3	10.8
82.5°	41.0	40.6	38.8	37.4	34.0	20.8	16.4	17.3	19.2	16.4	8.0
85°	15.7	15.7	30.4	25.6	23.3	14.1	11.6	12.5	14.7	11.9	5.4
87.5°	2.6	2.6	20.5	17.0	10.5	7.1	7.4	8.0	8.6	7.1	4.2
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°	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1
2.5°	1184.9	1163.4	1116.3	1070.9	1031.1	987.7	965.6	940.0	930.4	911.1	913.1
5°	1197.1	1152.1	1057.7	958.2	867.0	774.1	708.2	646.1	611.5	577.3	577.3
7.5°	1209.5	1141.0	995.0	835.9	682.2	523.1	410.4	320.2	269.9	236.3	235.3
10°	1218.1	1126.6	923.6	694.1	467.4	269.5	162.6	128.1	115.6	110.2	109.8
12.5°	1229.4	1112.2	842.3	526.9	259.6	128.1	101.5	96.1	93.8	92.5	92.5
15°	1239.0	1091.7	743.7	354.4	136.4	96.1	87.4	85.5	85.1	84.8	85.1
17.5°	1241.2	1062.5	625.5	207.5	98.9	83.9	80.0	78.5	78.5	78.2	78.2
20°	1236.0	1024.2	494.9	128.1	85.5	77.1	73.0	71.1	70.8	70.8	70.8
22.5°	1225.5	975.2	365.9	97.0	77.7	71.1	65.7	63.7	63.7	64.0	64.3
25°	1212.4	917.2	251.3	83.6	72.0	64.7	59.2	57.3	57.9	58.6	58.9
27.5°	1195.7	848.0	164.6	72.3	64.3	58.3	53.5	52.2	53.5	54.7	55.3
30°	1179.1	772.2	111.4	62.7	55.8	51.2	48.4	48.0	49.9	52.8	53.2
32.5°	1168.2	694.4	84.2	56.4	49.0	45.1	43.9	44.5	47.4	50.5	51.2
35°	1167.3	618.5	71.7	51.2	44.5	41.0	40.3	42.2	45.4	48.0	48.7
37.5°	1182.3	547.5	65.0	47.4	41.0	37.4	36.5	40.0	42.9	45.4	46.1
40°	1212.7	483.8	60.5	43.9	38.1	34.0	33.2	36.2	39.1	41.9	42.9
42.5°	1250.8	424.2	55.3	40.3	34.9	30.1	29.5	31.7	34.6	38.8	39.4
45°	1283.8	368.8	49.9	36.5	31.4	25.9	25.6	28.1	30.4	34.3	34.9
47.5°	1311.6	322.7	44.8	32.3	26.9	23.0	22.7	24.0	25.3	28.8	29.5
50°	1296.9	283.7	39.7	26.6	21.8	19.8	19.5	19.5	21.2	24.7	25.3
52.5°	1260.7	259.3	34.9	22.1	17.9	17.0	16.0	16.4	17.9	19.5	19.8
55°	1231.6	247.8	30.7	19.5	15.0	14.1	13.1	12.8	13.1	12.5	11.9
56°	1224.6	246.5	29.8	18.9	14.4	13.1	11.9	11.3	10.8	9.6	9.3
57.5°	1221.3	246.5	28.1	17.6	13.4	11.9	10.2	9.0	7.7	6.8	6.8
60°	1218.7	248.1	26.3	15.3	11.6	9.6	7.4	5.4	4.5	4.5	4.5
62.5°	1213.3	247.5	24.0	12.8	9.9	7.4	4.5	3.5	3.2	3.5	3.9
65°	1152.1	229.9	21.2	10.2	7.7	5.1	2.6	2.6	2.9	3.5	3.9
67.5°	928.4	174.2	17.3	8.0	5.4	3.9	2.3	2.3	2.9	3.5	3.9
70°	509.9	91.9	14.7	5.7	4.2	3.2	2.3	1.9	2.9	3.5	3.9
72.5°	124.5	38.5	13.4	4.5	3.9	2.9	1.9	1.9	2.9	3.5	3.9
75°	30.7	28.8	10.8	3.5	3.2	2.6	1.9	1.9	2.9	3.5	3.9
77.5°	14.4	38.1	7.4	3.2	2.9	2.3	1.9	1.9	2.9	3.5	3.5
80°	8.6	28.8	4.5	2.9	2.6	2.3	1.9	1.9	2.9	3.5	3.9
82.5°	5.1	8.3	3.2	2.9	2.6	1.9	1.9	1.9	2.9	3.5	3.9
85°	4.5	4.2	3.2	2.9	2.6	2.3	1.9	1.9	3.2	3.9	3.9
87.5°	3.5	3.2	2.9	2.6	2.6	2.3	1.9	1.9	2.9	3.5	3.9
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)