

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: P198647

Luminaire Tested: **XNV2-AF-02-LED-U-5MQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198647
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24129)
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-5MQ
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13136.8 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - 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

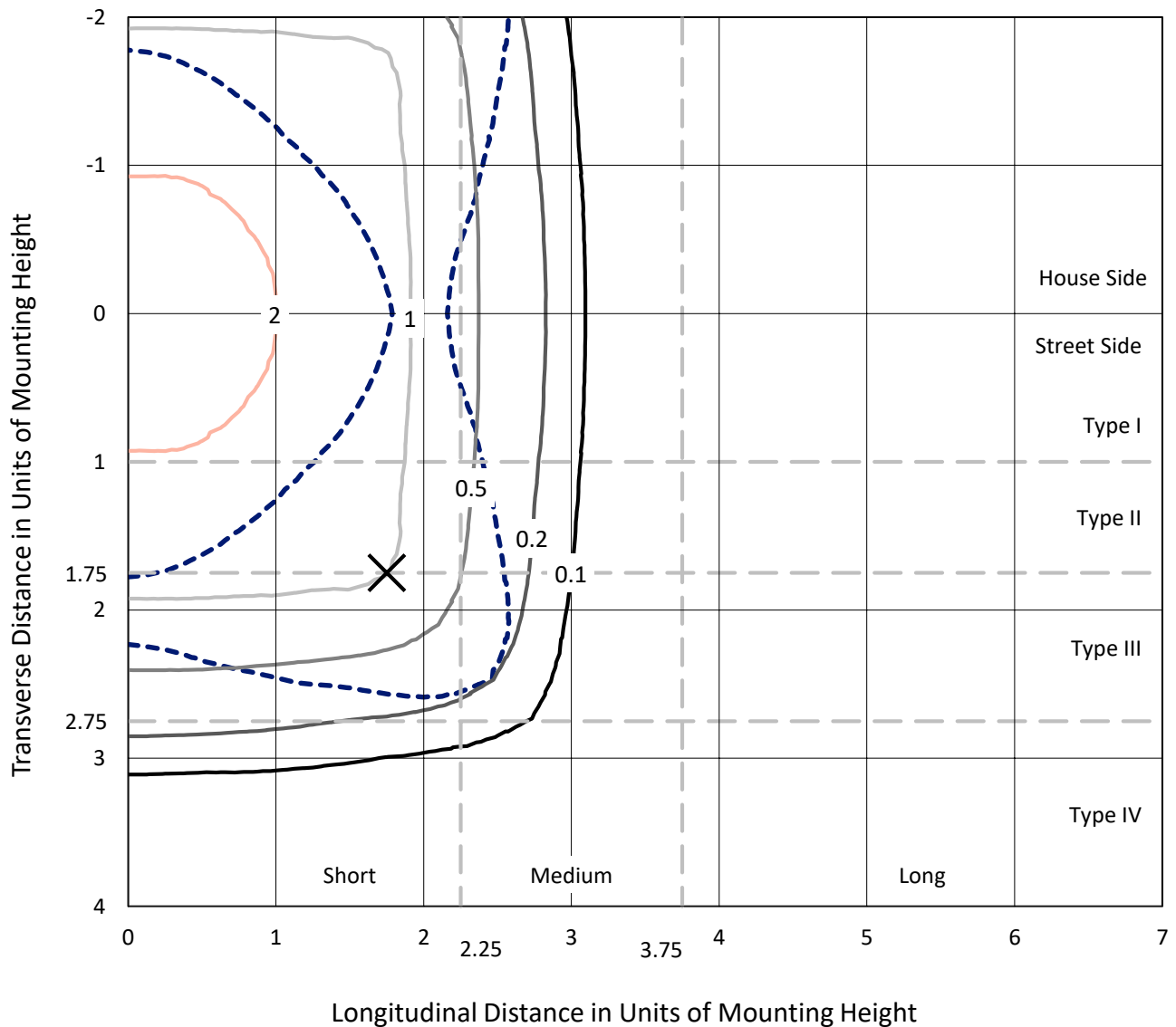


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

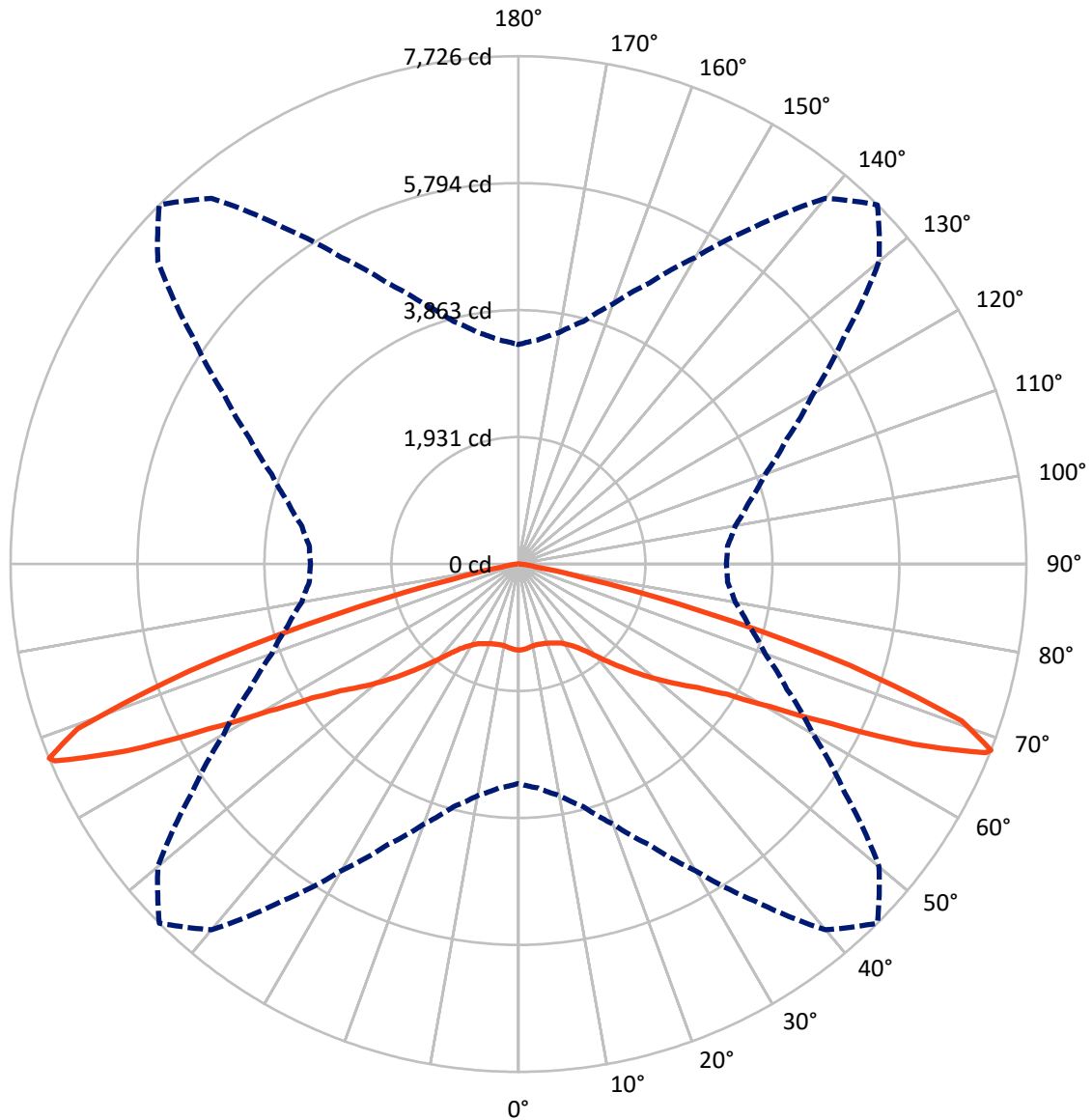


Based on 20 foot mounting height. Maximum calculated value = 3.3 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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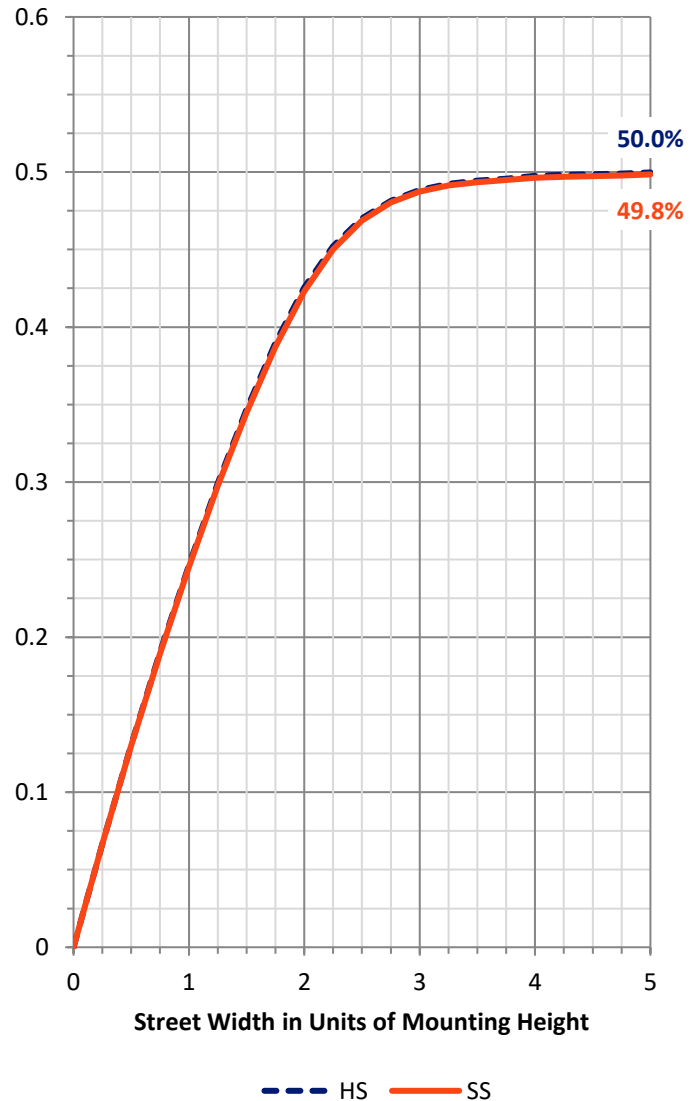
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6568.4	0.0	6568.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6568.4	0.0	6568.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	13136.8	0.0	13136.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.6	0.9
10°-20°	355.6	2.7
20°-30°	604.6	4.6
30°-40°	989.4	7.5
40°-50°	1768.2	13.5
50°-60°	2986.2	22.7
60°-70°	4630.5	35.2
70°-80°	1592.1	12.1
80°-90°	87.5	0.7
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°	13136.8	100.0
0°-180°	13136.8	100.0



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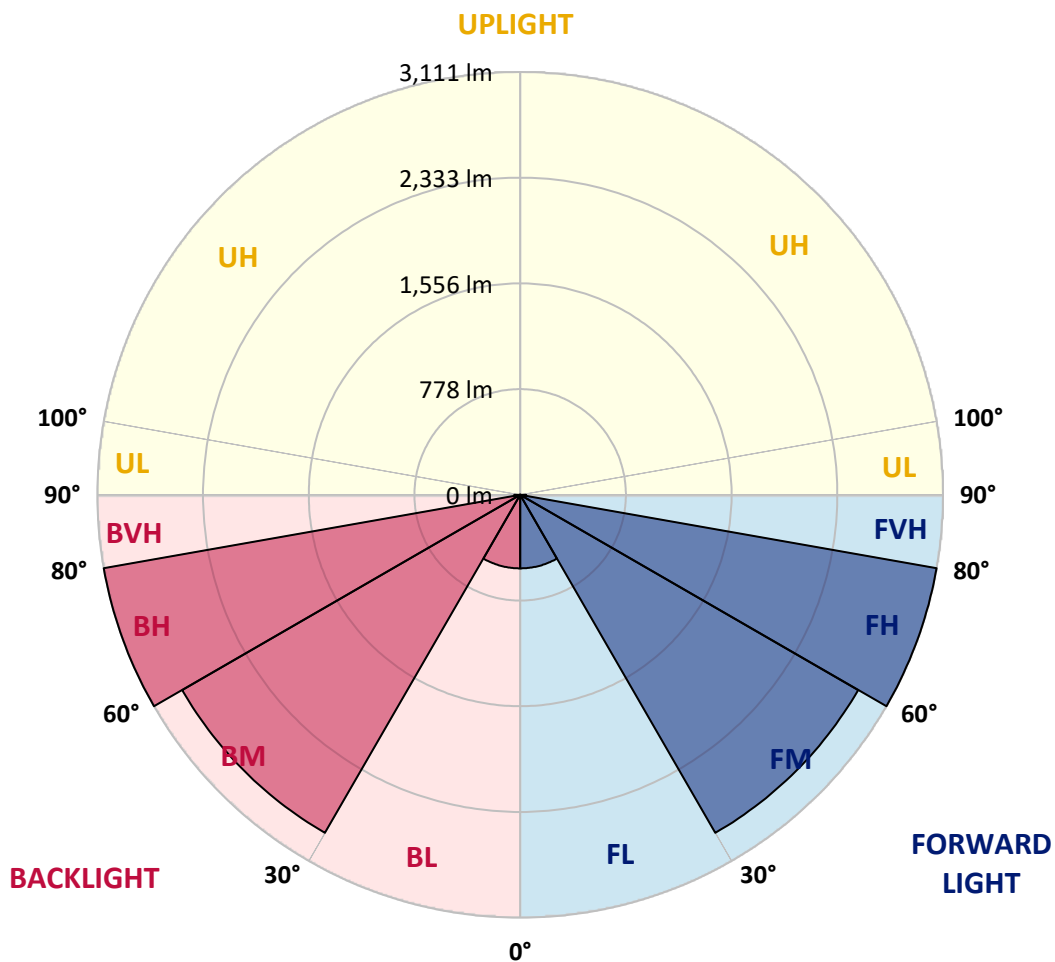
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	541.4	4.1			
FM	(30°-60°)	2871.9	21.9			
FH	(60°-80°)	3111.3	23.7			G2/5000
FVH	(80°-90°)	43.7	0.3			G1/100
BL	(0°-30°)	541.4	4.1	B2/1000		
BM	(30°-60°)	2871.9	21.9	B3/5000		
BH	(60°-80°)	3111.3	23.7	B4/5000		G2/5000
BVH	(80°-90°)	43.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1310.4	1310.4	1310.4	1310.4	1310.4	1310.4	1310.4	1310.4	1310.4	1310.4	1310.4
2.5°	1316.0	1316.0	1317.7	1316.8	1314.5	1312.0	1309.6	1307.2	1305.6	1304.0	1302.4
5°	1302.4	1302.4	1304.8	1303.2	1301.6	1299.1	1297.5	1295.2	1293.5	1291.9	1292.7
7.5°	1284.7	1286.3	1287.9	1287.1	1283.9	1283.1	1280.6	1279.8	1278.3	1275.8	1276.6
10°	1269.4	1270.2	1271.8	1271.0	1270.2	1267.7	1267.0	1266.2	1265.4	1262.1	1261.4
12.5°	1254.1	1255.8	1257.3	1258.1	1257.3	1258.1	1258.9	1259.8	1258.9	1257.3	1257.3
15°	1242.1	1243.7	1246.1	1248.5	1249.3	1254.1	1257.3	1260.6	1262.9	1263.8	1261.4
17.5°	1235.6	1238.1	1241.2	1246.1	1250.0	1255.8	1261.4	1266.2	1270.2	1271.0	1268.6
20°	1234.8	1237.3	1242.1	1247.7	1255.0	1262.1	1271.0	1278.3	1282.3	1284.7	1282.3
22.5°	1240.4	1243.7	1250.0	1257.3	1266.2	1275.8	1287.1	1295.2	1303.2	1306.4	1304.0
25°	1256.5	1259.8	1267.0	1275.8	1285.4	1297.5	1308.9	1319.3	1327.3	1331.4	1328.1
27.5°	1290.4	1291.2	1299.1	1308.9	1320.1	1330.6	1345.0	1349.9	1356.3	1360.3	1356.3
30°	1337.8	1339.3	1346.6	1362.0	1372.4	1386.0	1394.1	1398.9	1406.1	1410.1	1405.3
32.5°	1410.1	1411.8	1418.2	1432.7	1442.4	1452.8	1462.5	1465.7	1472.9	1477.8	1472.1
35°	1512.3	1515.6	1521.2	1530.8	1538.9	1546.9	1554.2	1551.7	1556.6	1563.1	1557.3
37.5°	1652.3	1651.6	1653.1	1660.4	1668.4	1673.2	1684.5	1678.9	1683.7	1689.3	1686.1
40°	1815.6	1815.6	1814.8	1827.7	1830.9	1835.7	1847.8	1840.6	1846.9	1853.4	1847.8
42.5°	2001.4	2004.7	2008.7	2019.1	2028.0	2029.6	2035.3	2032.0	2040.1	2045.7	2040.1
45°	2215.4	2220.2	2225.1	2249.2	2253.3	2256.4	2260.5	2250.0	2258.9	2263.7	2262.1
47.5°	2437.5	2446.3	2456.7	2481.7	2497.7	2505.0	2508.3	2496.2	2497.0	2504.2	2505.0
50°	2688.4	2698.0	2708.6	2736.7	2751.9	2764.8	2768.9	2755.2	2756.9	2762.5	2764.0
52.5°	2920.1	2931.4	2953.9	2991.7	3013.4	3035.9	3037.6	3020.7	3027.9	3031.9	3028.8
55°	3138.1	3152.6	3182.4	3233.0	3272.4	3316.7	3336.8	3318.4	3318.4	3315.1	3313.4
57.5°	3392.3	3408.4	3439.0	3497.7	3552.4	3615.9	3670.7	3689.2	3722.9	3734.2	3716.5
60°	3775.2	3792.1	3823.5	3900.7	3969.9	4062.4	4152.5	4225.7	4344.8	4409.1	4351.2
62.5°	4125.2	4150.9	4224.9	4360.0	4509.7	4681.0	4879.7	5021.3	5237.7	5345.5	5199.9
65°	4045.6	4097.8	4242.6	4455.0	4763.9	5135.5	5540.2	5928.7	6376.0	6605.2	6309.2
67.5°	3533.9	3578.2	3734.2	3981.1	4366.5	4878.9	5508.0	6312.4	7235.1	7664.7	7141.0
68°	3338.4	3421.3	3576.5	3821.8	4210.5	4714.0	5385.7	6254.5	7261.6	7725.8	7160.2
70°	2559.7	2589.5	2738.3	2958.7	3377.8	3871.8	4549.9	5540.2	6678.4	7156.3	6574.7
72.5°	1216.3	1234.0	1330.6	1547.7	1814.0	2216.2	2814.8	3748.7	4774.3	5271.5	4691.5
75°	445.7	449.7	472.2	523.6	623.5	774.7	1061.8	1642.7	2431.9	2900.0	2441.5
77.5°	240.5	241.3	250.2	263.0	280.7	300.8	344.3	461.8	744.9	1013.6	786.8
80°	151.2	150.5	159.3	169.7	181.8	191.5	195.5	209.2	235.7	275.9	253.4
82.5°	77.2	84.5	104.5	115.8	133.5	136.8	132.8	132.0	139.9	151.2	156.1
85°	42.7	37.8	55.5	74.0	80.4	82.9	83.7	78.9	77.2	75.6	79.7
87.5°	21.7	20.2	24.1	37.0	39.4	32.2	32.9	28.1	19.3	19.3	20.2
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1310.4	1310.4	1310.4	1310.4	1310.4	1310.4	1310.4	1310.4
2.5°	1300.8	1301.6	1300.0	1300.0	1300.0	1300.8	1300.0	1299.1
5°	1290.4	1291.9	1291.9	1292.7	1293.5	1293.5	1293.5	1293.5
7.5°	1275.0	1275.8	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5
10°	1260.6	1258.9	1258.1	1256.5	1256.5	1254.1	1255.0	1255.8
12.5°	1253.3	1250.0	1248.5	1246.1	1244.4	1242.1	1242.1	1242.9
15°	1256.5	1251.7	1246.9	1245.2	1243.7	1242.1	1240.4	1241.2
17.5°	1262.9	1257.3	1251.7	1248.5	1245.2	1242.9	1242.1	1242.9
20°	1276.6	1268.6	1259.8	1254.1	1247.7	1246.1	1243.7	1246.1
22.5°	1295.2	1285.4	1274.2	1263.8	1256.5	1253.3	1250.0	1252.5
25°	1317.7	1307.2	1296.0	1283.9	1275.8	1273.5	1269.4	1269.4
27.5°	1349.1	1340.2	1330.6	1319.3	1311.2	1308.9	1302.4	1302.4
30°	1398.9	1390.1	1381.2	1371.6	1363.5	1361.1	1353.1	1353.1
32.5°	1464.9	1455.2	1449.6	1441.5	1435.1	1431.1	1421.4	1420.7
35°	1553.4	1544.6	1543.7	1538.1	1531.7	1532.5	1522.8	1521.2
37.5°	1680.5	1673.2	1675.6	1670.8	1665.2	1670.0	1664.3	1664.3
40°	1842.9	1840.6	1842.9	1839.8	1840.6	1841.3	1836.5	1838.1
42.5°	2039.3	2032.8	2047.3	2045.7	2043.2	2049.7	2038.4	2030.4
45°	2265.3	2262.9	2277.4	2279.7	2274.9	2278.9	2258.9	2258.1
47.5°	2510.6	2510.6	2523.5	2521.9	2517.1	2517.9	2493.7	2478.5
50°	2766.5	2764.8	2777.7	2774.5	2768.1	2767.3	2742.3	2727.1
52.5°	3032.7	3032.7	3051.3	3042.4	3027.1	3019.9	2989.3	2969.2
55°	3327.1	3323.2	3328.8	3299.8	3270.1	3248.3	3210.5	3195.2
57.5°	3699.6	3653.0	3612.8	3575.7	3533.9	3508.1	3463.9	3447.9
60°	4228.2	4103.5	4049.6	3975.5	3906.3	3871.8	3813.0	3781.6
62.5°	4960.2	4753.4	4607.0	4443.7	4286.1	4175.1	4085.8	4046.3
65°	5806.5	5356.0	4983.5	4633.6	4336.7	4101.0	3969.9	3928.8
67.5°	6128.2	5301.2	4658.5	4156.6	3796.2	3515.4	3358.6	3325.5
68°	6059.9	5175.7	4508.0	3994.0	3632.0	3348.8	3192.8	3163.1
70°	5345.5	4366.5	3661.8	3150.2	2812.3	2542.9	2432.6	2385.1
72.5°	3644.1	2804.3	2151.1	1720.7	1468.1	1297.5	1196.2	1161.6
75°	1677.2	1133.4	757.0	565.5	480.3	439.3	407.9	399.8
77.5°	489.1	355.6	305.7	283.2	266.3	251.7	241.3	240.5
80°	232.5	218.0	211.5	197.1	181.8	168.2	158.5	160.1
82.5°	156.1	152.0	152.0	137.6	113.4	97.4	80.4	72.4
85°	82.9	86.0	90.9	86.0	74.8	55.5	36.2	39.4
87.5°	28.1	32.2	33.8	32.9	29.8	22.5	16.9	16.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)