

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: P198645

Luminaire Tested: **XNV2-AF-02-LED-U-5MQ-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198645
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-800
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10614.1 lumens
Efficiency: N/A
Efficacy: 124.9 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

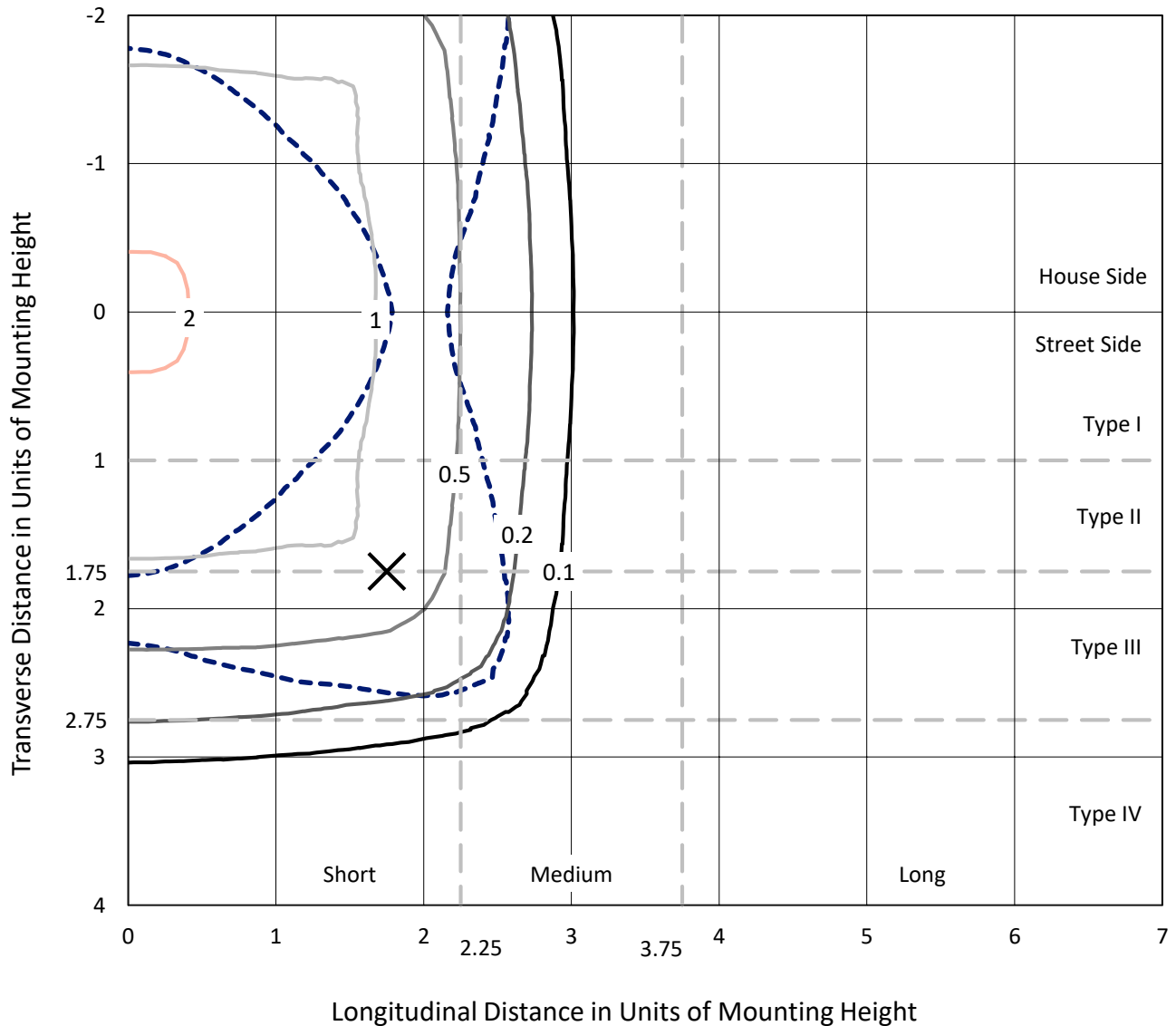
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

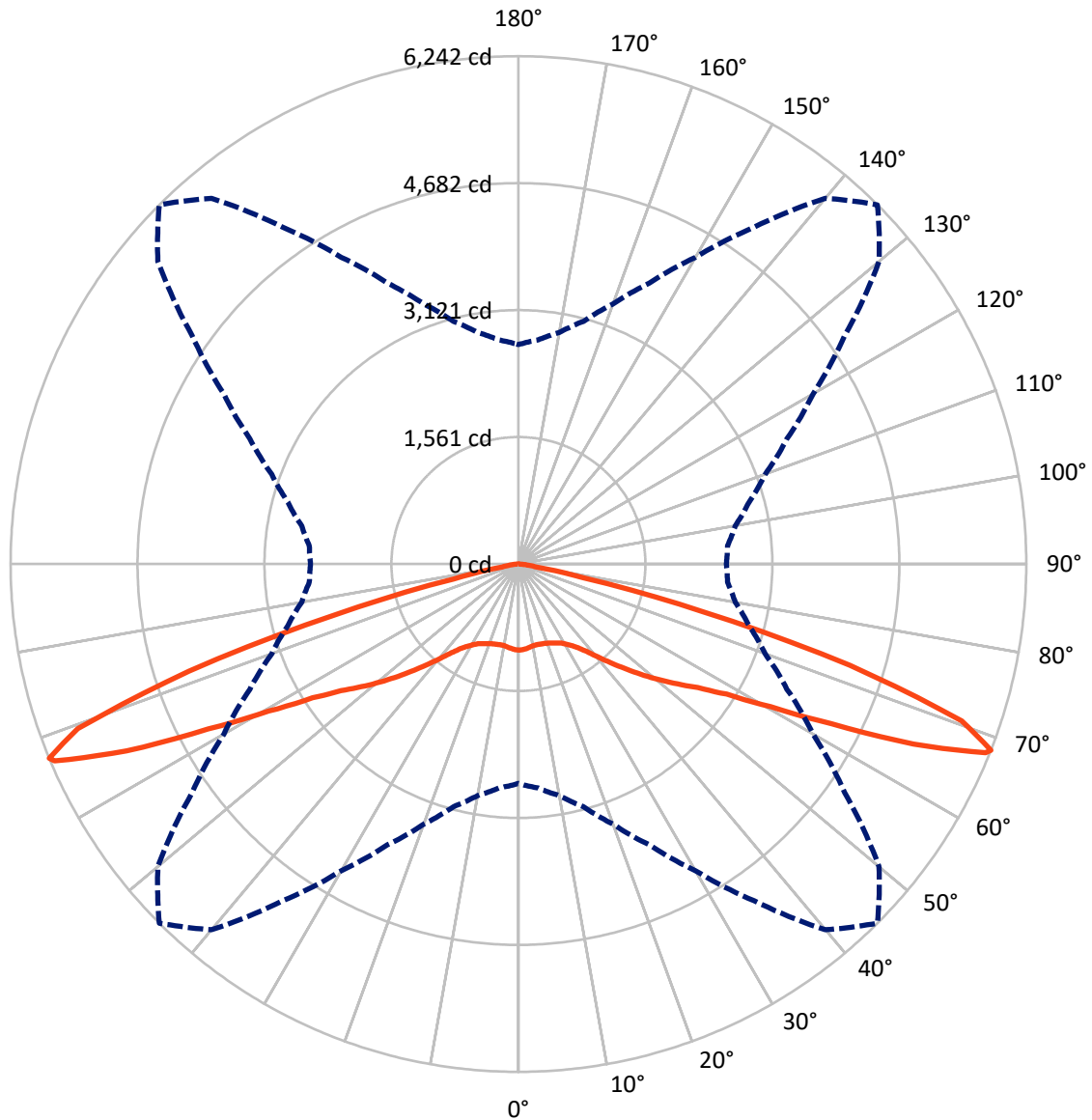
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.6 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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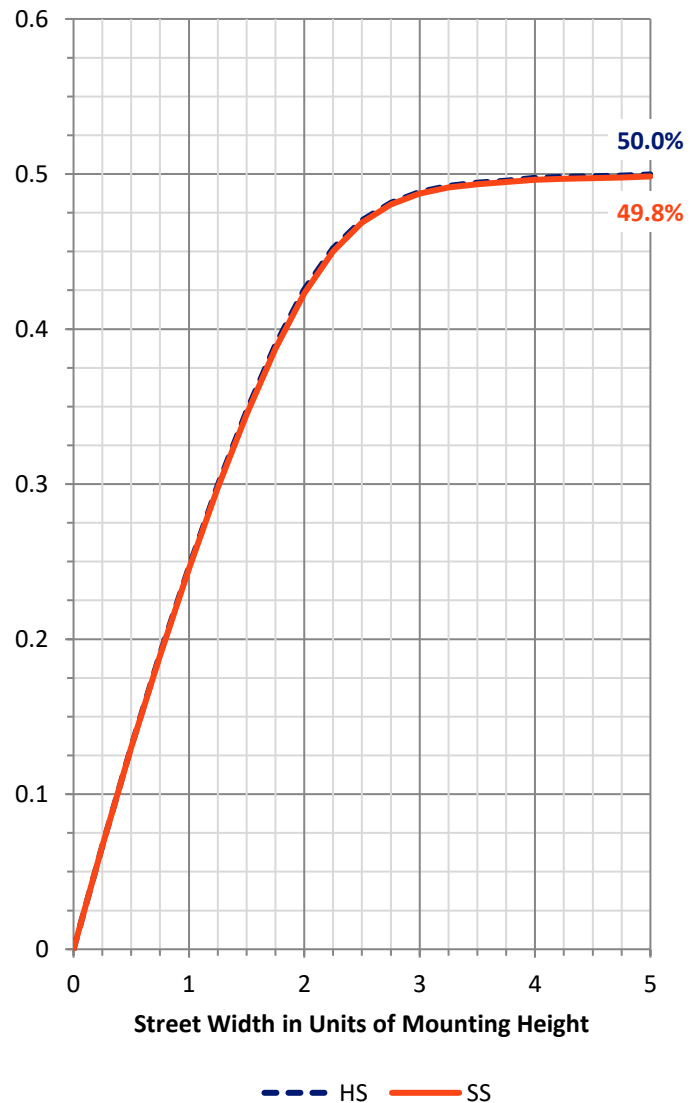
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5307.1	0.0	5307.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5307.1	0.0	5307.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	10614.1	0.0	10614.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.1	0.9
10°-20°	287.3	2.7
20°-30°	488.5	4.6
30°-40°	799.4	7.5
40°-50°	1428.7	13.5
50°-60°	2412.8	22.7
60°-70°	3741.3	35.2
70°-80°	1286.4	12.1
80°-90°	70.7	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°	10614.1	100.0
0°-180°	10614.1	100.0



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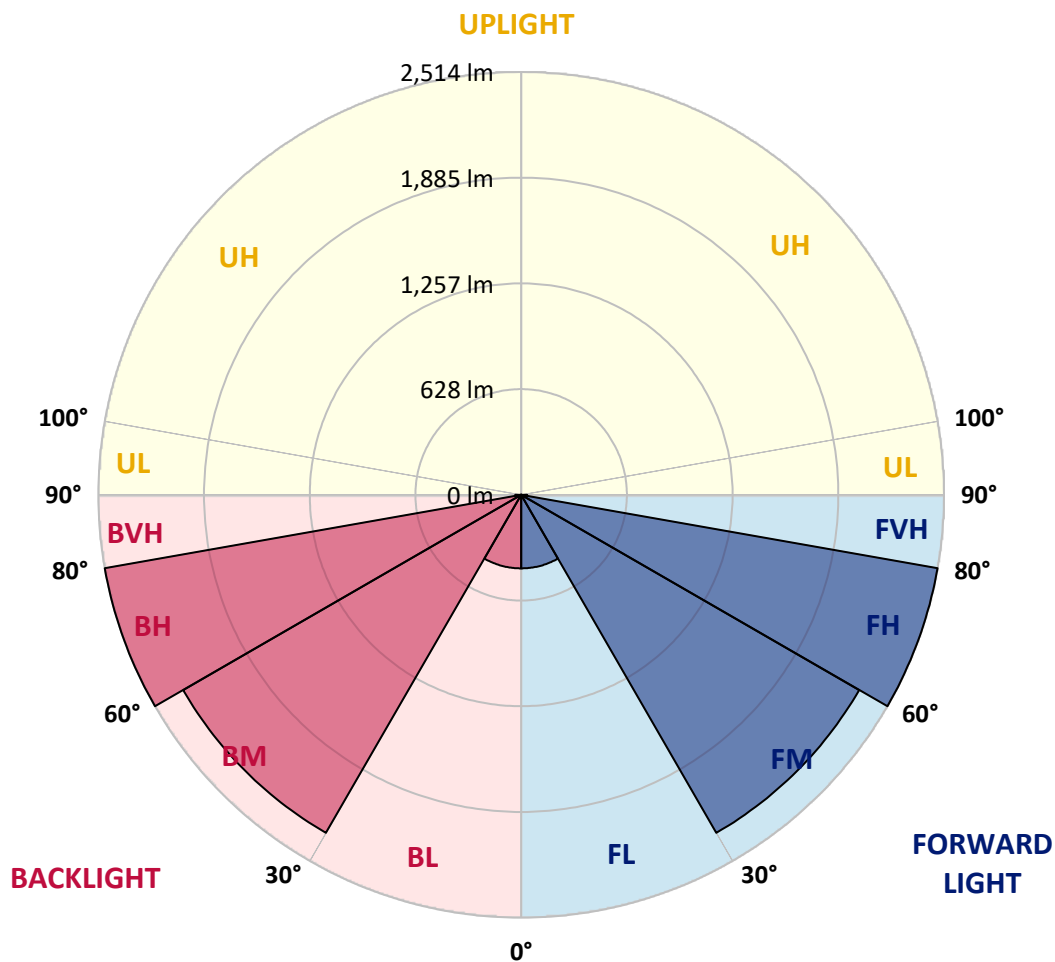
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	437.5	4.1			
FM (30°-60°)	2320.4	21.9			
FH (60°-80°)	2513.8	23.7			G2/5000
FVH (80°-90°)	35.3	0.3			G1/100
BL (0°-30°)	437.5	4.1	B1/500		
BM (30°-60°)	2320.4	21.9	B2/2500		
BH (60°-80°)	2513.8	23.7	B4/5000		G2/5000
BVH (80°-90°)	35.3	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°	1058.8	1058.8	1058.8	1058.8	1058.8	1058.8	1058.8	1058.8	1058.8	1058.8	1058.8
2.5°	1063.4	1063.4	1064.7	1064.0	1062.0	1060.1	1058.1	1056.2	1054.9	1053.6	1052.3
5°	1052.3	1052.3	1054.3	1052.9	1051.6	1049.6	1048.4	1046.5	1045.1	1043.8	1044.5
7.5°	1038.0	1039.3	1040.5	1039.9	1037.4	1036.7	1034.7	1034.1	1032.8	1030.8	1031.5
10°	1025.6	1026.3	1027.6	1026.9	1026.3	1024.4	1023.7	1023.1	1022.4	1019.8	1019.2
12.5°	1013.3	1014.6	1015.9	1016.5	1015.9	1016.5	1017.2	1017.8	1017.2	1015.9	1015.9
15°	1003.5	1004.8	1006.8	1008.7	1009.3	1013.3	1015.9	1018.4	1020.4	1021.1	1019.2
17.5°	998.3	1000.3	1002.9	1006.8	1010.1	1014.6	1019.2	1023.1	1026.3	1026.9	1025.0
20°	997.7	999.6	1003.5	1008.1	1013.9	1019.8	1026.9	1032.8	1036.0	1038.0	1036.0
22.5°	1002.3	1004.8	1010.1	1015.9	1023.1	1030.8	1039.9	1046.5	1052.9	1055.6	1053.6
25°	1015.3	1017.8	1023.7	1030.8	1038.6	1048.4	1057.5	1065.9	1072.5	1075.7	1073.1
27.5°	1042.6	1043.2	1049.6	1057.5	1066.6	1075.0	1086.8	1090.7	1095.9	1099.1	1095.9
30°	1080.8	1082.2	1088.0	1100.4	1108.9	1119.9	1126.4	1130.3	1136.1	1139.4	1135.5
32.5°	1139.4	1140.7	1145.9	1157.6	1165.3	1173.8	1181.6	1184.3	1190.1	1194.0	1189.4
35°	1221.9	1224.6	1229.1	1236.8	1243.4	1249.8	1255.8	1253.8	1257.7	1262.8	1258.3
37.5°	1335.1	1334.3	1335.7	1341.5	1348.0	1351.9	1361.0	1356.4	1360.4	1364.9	1362.4
40°	1467.0	1467.0	1466.3	1476.7	1479.3	1483.2	1493.0	1487.2	1492.3	1497.5	1493.0
42.5°	1617.1	1619.7	1622.9	1631.4	1638.6	1639.9	1644.4	1641.8	1648.3	1652.9	1648.3
45°	1790.0	1793.9	1797.8	1817.3	1820.5	1823.1	1826.4	1818.0	1825.1	1829.0	1827.7
47.5°	1969.4	1976.5	1985.0	2005.2	2018.2	2024.0	2026.6	2016.8	2017.5	2023.3	2024.0
50°	2172.1	2180.0	2188.4	2211.2	2223.5	2233.9	2237.2	2226.1	2227.5	2232.0	2233.3
52.5°	2359.3	2368.4	2386.6	2417.2	2434.7	2452.9	2454.3	2440.7	2446.5	2449.8	2447.1
55°	2535.5	2547.2	2571.3	2612.2	2644.0	2679.8	2696.1	2681.1	2681.1	2678.5	2677.2
57.5°	2740.9	2753.9	2778.6	2826.0	2870.2	2921.5	2965.7	2980.8	3008.0	3017.1	3002.9
60°	3050.2	3063.9	3089.3	3151.7	3207.6	3282.3	3355.1	3414.3	3510.5	3562.4	3515.7
62.5°	3333.0	3353.8	3413.6	3522.8	3643.8	3782.2	3942.7	4057.1	4231.9	4319.0	4201.4
65°	3268.6	3310.9	3427.9	3599.5	3849.1	4149.4	4476.3	4790.3	5151.6	5336.8	5097.7
67.5°	2855.3	2891.1	3017.1	3216.7	3528.1	3942.0	4450.3	5100.2	5845.8	6192.8	5769.7
68°	2697.3	2764.3	2889.7	3088.0	3401.9	3808.8	4351.5	5053.5	5867.2	6242.3	5785.3
70°	2068.2	2092.2	2212.4	2390.5	2729.2	3128.3	3676.2	4476.3	5396.0	5782.1	5312.2
72.5°	982.7	997.1	1075.0	1250.6	1465.7	1790.7	2274.2	3028.9	3857.5	4259.3	3790.5
75°	360.1	363.4	381.6	423.1	503.7	625.9	857.9	1327.2	1964.9	2343.2	1972.7
77.5°	194.4	195.0	202.1	212.6	226.8	243.1	278.1	373.1	601.9	819.0	635.7
80°	122.2	121.5	128.7	137.2	146.9	154.7	157.9	169.0	190.5	222.9	204.7
82.5°	62.4	68.2	84.5	93.6	107.9	110.5	107.2	106.6	113.1	122.2	126.1
85°	34.5	30.6	44.8	59.8	65.0	66.9	67.6	63.7	62.4	61.1	64.3
87.5°	17.6	16.3	19.5	29.9	31.8	26.0	26.7	22.7	15.5	15.5	16.3
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°	1058.8	1058.8	1058.8	1058.8	1058.8	1058.8	1058.8	1058.8
2.5°	1051.0	1051.6	1050.4	1050.4	1050.4	1051.0	1050.4	1049.6
5°	1042.6	1043.8	1043.8	1044.5	1045.1	1045.1	1045.1	1045.1
7.5°	1030.2	1030.8	1032.2	1032.2	1032.2	1032.2	1032.2	1032.2
10°	1018.4	1017.2	1016.5	1015.3	1015.3	1013.3	1013.9	1014.6
12.5°	1012.6	1010.1	1008.7	1006.8	1005.5	1003.5	1003.5	1004.2
15°	1015.3	1011.4	1007.4	1006.2	1004.8	1003.5	1002.3	1002.9
17.5°	1020.4	1015.9	1011.4	1008.7	1006.2	1004.2	1003.5	1004.2
20°	1031.5	1025.0	1017.8	1013.3	1008.1	1006.8	1004.8	1006.8
22.5°	1046.5	1038.6	1029.5	1021.1	1015.3	1012.6	1010.1	1012.0
25°	1064.7	1056.2	1047.1	1037.4	1030.8	1028.9	1025.6	1025.6
27.5°	1090.0	1082.8	1075.0	1065.9	1059.5	1057.5	1052.3	1052.3
30°	1130.3	1123.1	1116.0	1108.2	1101.7	1099.8	1093.2	1093.2
32.5°	1183.6	1175.8	1171.3	1164.7	1159.5	1156.2	1148.5	1147.9
35°	1255.1	1247.9	1247.3	1242.7	1237.6	1238.2	1230.4	1229.1
37.5°	1357.8	1351.9	1353.9	1350.0	1345.4	1349.4	1344.8	1344.8
40°	1489.1	1487.2	1489.1	1486.4	1487.2	1487.8	1483.9	1485.1
42.5°	1647.7	1642.4	1654.1	1652.9	1650.9	1656.2	1647.1	1640.5
45°	1830.3	1828.3	1840.1	1842.0	1838.1	1841.3	1825.1	1824.4
47.5°	2028.5	2028.5	2038.9	2037.6	2033.7	2034.3	2014.9	2002.5
50°	2235.2	2233.9	2244.4	2241.7	2236.5	2235.9	2215.7	2203.3
52.5°	2450.4	2450.4	2465.3	2458.2	2445.8	2439.9	2415.3	2399.0
55°	2688.2	2685.0	2689.5	2666.1	2642.1	2624.6	2594.0	2581.6
57.5°	2989.2	2951.5	2919.0	2889.1	2855.3	2834.5	2798.8	2785.7
60°	3416.2	3315.5	3271.9	3212.2	3156.2	3128.3	3080.8	3055.5
62.5°	4007.7	3840.7	3722.3	3590.4	3463.0	3373.3	3301.2	3269.4
65°	4691.5	4327.5	4026.5	3743.8	3503.9	3313.5	3207.6	3174.4
67.5°	4951.4	4283.3	3763.9	3358.3	3067.2	2840.3	2713.6	2687.0
68°	4896.1	4181.8	3642.4	3227.1	2934.5	2705.8	2579.7	2555.6
70°	4319.0	3528.1	2958.7	2545.3	2272.3	2054.5	1965.5	1927.1
72.5°	2944.4	2265.7	1738.0	1390.3	1186.2	1048.4	966.5	938.6
75°	1355.2	915.8	611.6	457.0	388.0	354.9	329.5	323.0
77.5°	395.2	287.2	246.9	228.8	215.1	203.5	195.0	194.4
80°	187.8	176.2	170.9	159.3	146.9	135.8	128.1	129.3
82.5°	126.1	122.9	122.9	111.2	91.7	78.7	65.0	58.5
85°	66.9	69.6	73.4	69.6	60.5	44.8	29.3	31.8
87.5°	22.7	26.0	27.3	26.7	24.0	18.2	13.6	13.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)