

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: P271281

Luminaire Tested: **XNV2-AF-02-LED-U-5MQ-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271281
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-7027
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 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: 11157.5 lumens
Efficiency: N/A
Efficacy: 100.5 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

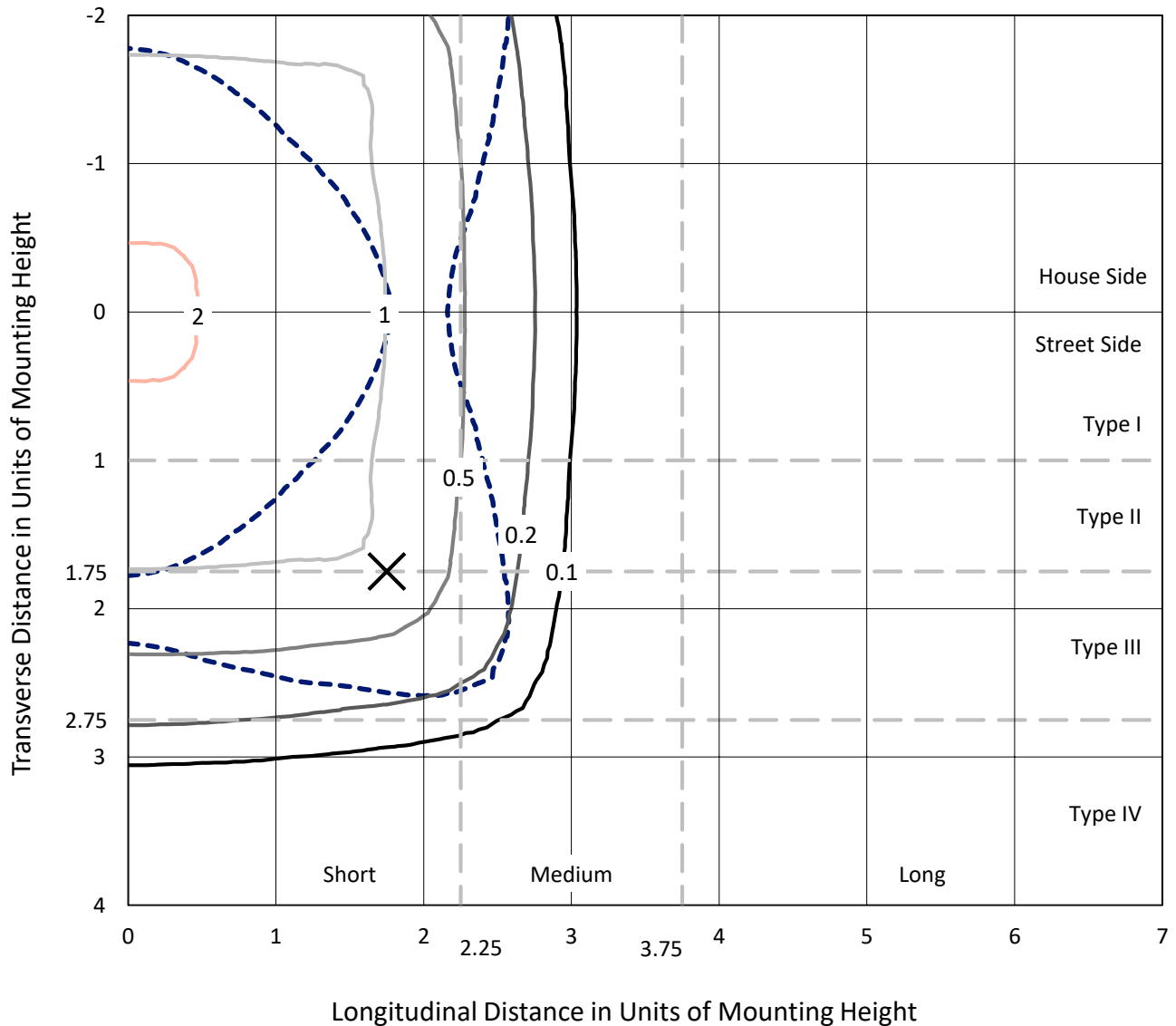


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

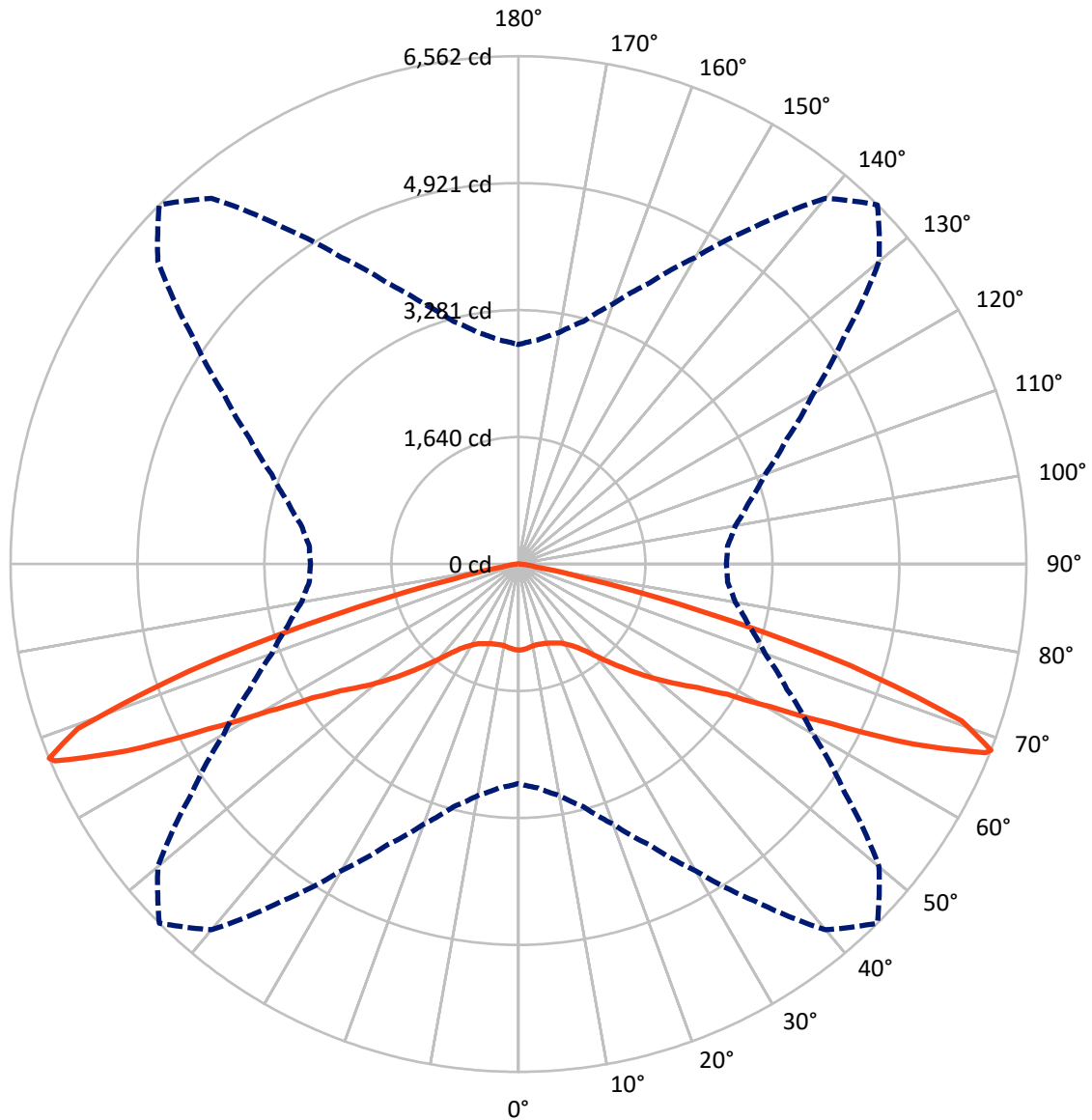


Based on 20 foot mounting height. Maximum calculated value = 2.8 fc
 Type V - Short - Full Cutoff

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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	5578.7	0.0	5578.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5578.7	0.0	5578.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	11157.5	0.0	11157.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.1	0.9
10°-20°	302.0	2.7
20°-30°	513.5	4.6
30°-40°	840.3	7.5
40°-50°	1501.8	13.5
50°-60°	2536.3	22.7
60°-70°	3932.9	35.2
70°-80°	1352.2	12.1
80°-90°	74.3	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°	11157.5	100.0
0°-180°	11157.5	100.0



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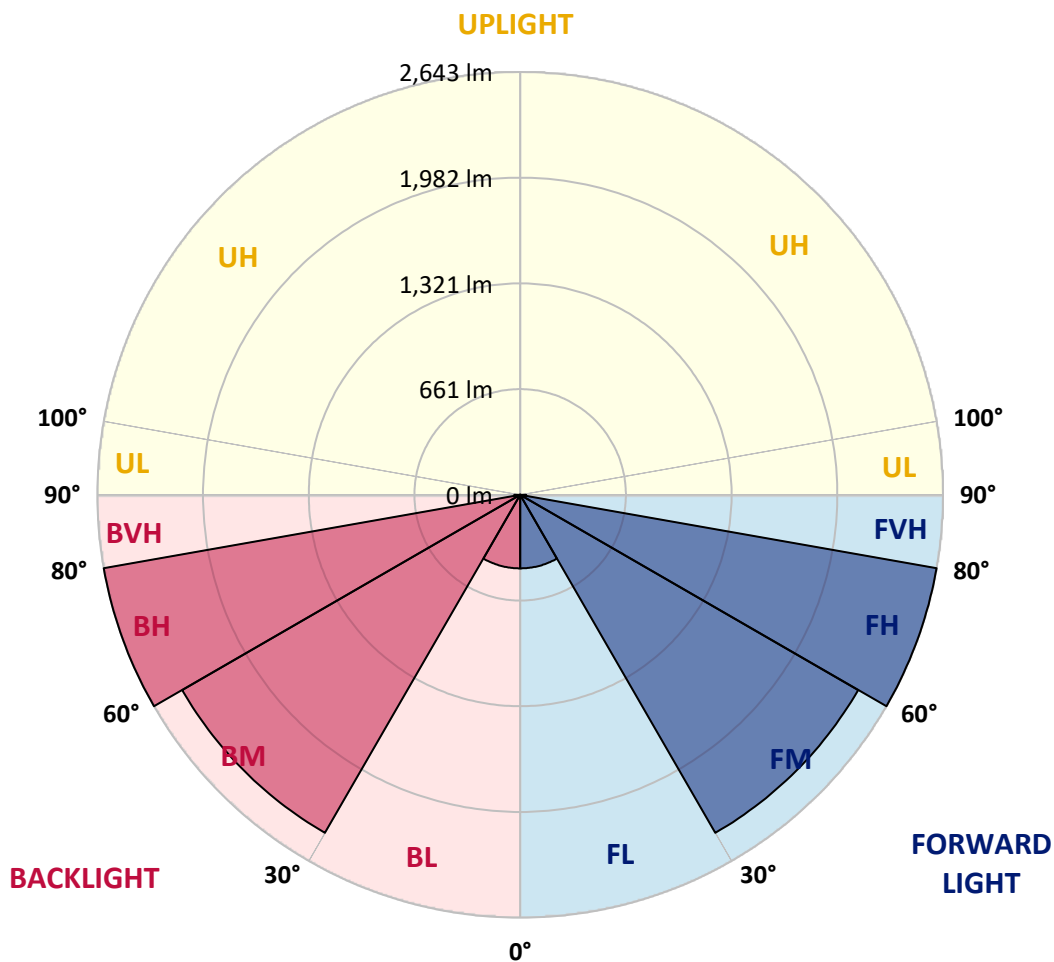
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	459.8	4.1			
FM	(30°-60°)	2439.2	21.9			
FH	(60°-80°)	2642.5	23.7			G2/5000
FVH	(80°-90°)	37.2	0.3			G1/100
BL	(0°-30°)	459.8	4.1	B1/500		
BM	(30°-60°)	2439.2	21.9	B2/2500		
BH	(60°-80°)	2642.5	23.7	B4/5000		G2/5000
BVH	(80°-90°)	37.2	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°	1113.0	1113.0	1113.0	1113.0	1113.0	1113.0	1113.0	1113.0	1113.0	1113.0	1113.0
2.5°	1117.9	1117.9	1119.2	1118.5	1116.5	1114.3	1112.3	1110.2	1108.9	1107.5	1106.2
5°	1106.2	1106.2	1108.1	1106.8	1105.5	1103.4	1102.1	1100.1	1098.6	1097.3	1098.0
7.5°	1091.1	1092.5	1093.9	1093.1	1090.5	1089.7	1087.7	1086.9	1085.6	1083.6	1084.3
10°	1078.1	1078.9	1080.2	1079.6	1078.9	1076.8	1076.1	1075.5	1074.7	1071.9	1071.3
12.5°	1065.2	1066.6	1067.8	1068.5	1067.8	1068.5	1069.3	1069.9	1069.3	1067.8	1067.8
15°	1054.9	1056.2	1058.4	1060.4	1061.1	1065.2	1067.8	1070.6	1072.7	1073.4	1071.3
17.5°	1049.5	1051.5	1054.3	1058.4	1061.7	1066.6	1071.3	1075.5	1078.9	1079.6	1077.4
20°	1048.9	1050.7	1054.9	1059.7	1065.8	1071.9	1079.6	1085.6	1089.0	1091.1	1089.0
22.5°	1053.5	1056.2	1061.7	1067.8	1075.5	1083.6	1093.1	1100.1	1106.8	1109.5	1107.5
25°	1067.2	1069.9	1076.1	1083.6	1091.8	1102.1	1111.7	1120.5	1127.4	1130.7	1128.0
27.5°	1095.9	1096.7	1103.4	1111.7	1121.2	1130.1	1142.4	1146.4	1151.9	1155.4	1151.9
30°	1136.3	1137.7	1143.7	1156.7	1165.6	1177.1	1184.1	1188.2	1194.2	1197.7	1193.6
32.5°	1197.7	1199.1	1204.5	1216.8	1225.1	1233.9	1242.1	1244.8	1251.0	1255.1	1250.4
35°	1284.4	1287.2	1292.0	1300.1	1307.0	1314.0	1320.0	1318.0	1322.0	1327.5	1322.8
37.5°	1403.3	1402.7	1404.1	1410.2	1417.0	1421.1	1430.7	1425.9	1430.0	1434.9	1432.1
40°	1542.1	1542.1	1541.4	1552.4	1555.1	1559.2	1569.3	1563.2	1568.7	1574.2	1569.3
42.5°	1700.0	1702.6	1706.1	1715.0	1722.4	1723.8	1728.6	1725.9	1732.7	1737.5	1732.7
45°	1881.6	1885.7	1889.9	1910.3	1913.7	1916.4	1919.9	1911.1	1918.5	1922.6	1921.3
47.5°	2070.2	2077.7	2086.7	2107.9	2121.4	2127.5	2130.3	2120.1	2120.8	2126.8	2127.5
50°	2283.4	2291.5	2300.5	2324.4	2337.4	2348.3	2351.8	2340.1	2341.4	2346.3	2347.6
52.5°	2480.1	2489.7	2508.8	2540.9	2559.5	2578.6	2579.9	2565.6	2571.7	2575.1	2572.3
55°	2665.4	2677.6	2702.9	2745.8	2779.4	2816.9	2834.1	2818.3	2818.3	2815.6	2814.2
57.5°	2881.3	2894.9	2920.7	2970.8	3017.1	3071.1	3117.6	3133.3	3162.0	3171.6	3156.6
60°	3206.4	3220.8	3247.5	3312.9	3371.8	3450.3	3526.8	3589.1	3690.1	3744.9	3695.6
62.5°	3503.6	3525.5	3588.4	3703.2	3830.3	3975.8	4144.5	4264.8	4448.5	4540.2	4416.4
65°	3435.9	3480.5	3603.5	3783.8	4046.1	4361.8	4705.4	5035.4	5415.3	5610.1	5358.6
67.5°	3001.4	3039.1	3171.6	3381.3	3708.7	4143.8	4678.2	5361.4	6145.0	6509.8	6065.0
68°	2835.4	2905.7	3037.7	3246.0	3576.1	4003.7	4574.3	5312.1	6167.6	6561.8	6081.4
70°	2174.1	2199.3	2325.7	2513.0	2868.8	3288.4	3864.4	4705.4	5672.3	6078.1	5584.1
72.5°	1033.1	1048.1	1130.1	1314.5	1540.8	1882.3	2390.7	3184.0	4054.9	4477.2	3984.6
75°	378.5	381.9	401.1	444.8	529.6	658.0	901.9	1395.2	2065.5	2463.1	2073.6
77.5°	204.3	205.0	212.4	223.4	238.4	255.6	292.4	392.2	632.6	860.8	668.2
80°	128.5	127.7	135.3	144.2	154.4	162.7	166.0	177.7	200.2	234.4	215.2
82.5°	65.5	71.8	88.8	98.4	113.5	116.2	112.7	112.1	118.8	128.5	132.5
85°	36.2	32.1	47.2	62.8	68.4	70.3	71.1	67.0	65.5	64.1	67.6
87.5°	18.4	17.1	20.5	31.4	33.4	27.3	27.9	24.0	16.3	16.3	17.1
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°	1113.0	1113.0	1113.0	1113.0	1113.0	1113.0	1113.0	1113.0
2.5°	1104.7	1105.5	1104.0	1104.0	1104.0	1104.7	1104.0	1103.4
5°	1095.9	1097.3	1097.3	1098.0	1098.6	1098.6	1098.6	1098.6
7.5°	1082.9	1083.6	1085.1	1085.1	1085.1	1085.1	1085.1	1085.1
10°	1070.6	1069.3	1068.5	1067.2	1067.2	1065.2	1065.8	1066.6
12.5°	1064.5	1061.7	1060.4	1058.4	1056.9	1054.9	1054.9	1055.6
15°	1067.2	1063.1	1059.0	1057.7	1056.2	1054.9	1053.5	1054.3
17.5°	1072.7	1067.8	1063.1	1060.4	1057.7	1055.6	1054.9	1055.6
20°	1084.3	1077.4	1069.9	1065.2	1059.7	1058.4	1056.2	1058.4
22.5°	1100.1	1091.8	1082.3	1073.4	1067.2	1064.5	1061.7	1063.9
25°	1119.2	1110.2	1100.8	1090.5	1083.6	1081.6	1078.1	1078.1
27.5°	1145.8	1138.2	1130.1	1120.5	1113.7	1111.7	1106.2	1106.2
30°	1188.2	1180.6	1173.1	1164.9	1158.0	1155.9	1149.2	1149.2
32.5°	1244.2	1236.0	1231.1	1224.4	1218.9	1215.4	1207.3	1206.7
35°	1319.3	1311.9	1311.2	1306.3	1300.8	1301.6	1293.4	1292.0
37.5°	1427.2	1421.1	1423.2	1419.1	1414.3	1418.5	1413.7	1413.7
40°	1565.2	1563.2	1565.2	1562.5	1563.2	1563.9	1559.8	1561.3
42.5°	1732.0	1726.5	1738.8	1737.5	1735.4	1740.8	1731.4	1724.4
45°	1924.0	1922.0	1934.2	1936.2	1932.2	1935.6	1918.5	1917.8
47.5°	2132.3	2132.3	2143.4	2142.0	2137.8	2138.5	2118.1	2105.1
50°	2349.6	2348.3	2359.2	2356.4	2351.0	2350.3	2329.1	2316.2
52.5°	2575.8	2575.8	2591.5	2584.1	2570.9	2564.9	2538.9	2521.8
55°	2825.9	2822.5	2827.2	2802.6	2777.4	2759.0	2726.7	2713.8
57.5°	3142.2	3102.6	3068.4	3037.0	3001.4	2979.6	2941.9	2928.4
60°	3591.1	3485.2	3439.4	3376.5	3317.8	3288.4	3238.5	3211.9
62.5°	4212.8	4037.3	3912.8	3774.1	3640.3	3546.0	3470.2	3436.6
65°	4931.5	4548.9	4232.6	3935.5	3683.3	3483.2	3371.8	3336.9
67.5°	5204.9	4502.6	3956.7	3530.2	3224.1	2985.7	2852.5	2824.5
68°	5146.7	4395.9	3828.8	3392.3	3084.8	2844.4	2711.8	2686.6
70°	4540.2	3708.7	3110.1	2675.5	2388.7	2159.7	2066.1	2025.8
72.5°	3095.1	2381.8	1827.0	1461.5	1246.8	1102.1	1016.0	986.6
75°	1424.5	962.7	642.9	480.4	407.9	373.1	346.3	339.6
77.5°	415.3	302.0	259.6	240.4	226.2	213.8	205.0	204.3
80°	197.4	185.2	179.8	167.4	154.4	142.8	134.6	136.0
82.5°	132.5	129.1	129.1	116.8	96.4	82.6	68.4	61.5
85°	70.3	73.1	77.3	73.1	63.5	47.2	30.7	33.4
87.5°	24.0	27.3	28.7	27.9	25.3	19.1	14.4	14.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)