

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: P271284

Luminaire Tested: **XNV2-AF-02-LED-U-5MQ-7027-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271284
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-7027-1200
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12240.1 lumens
Efficiency: N/A
Efficacy: 95.6 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): 128
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

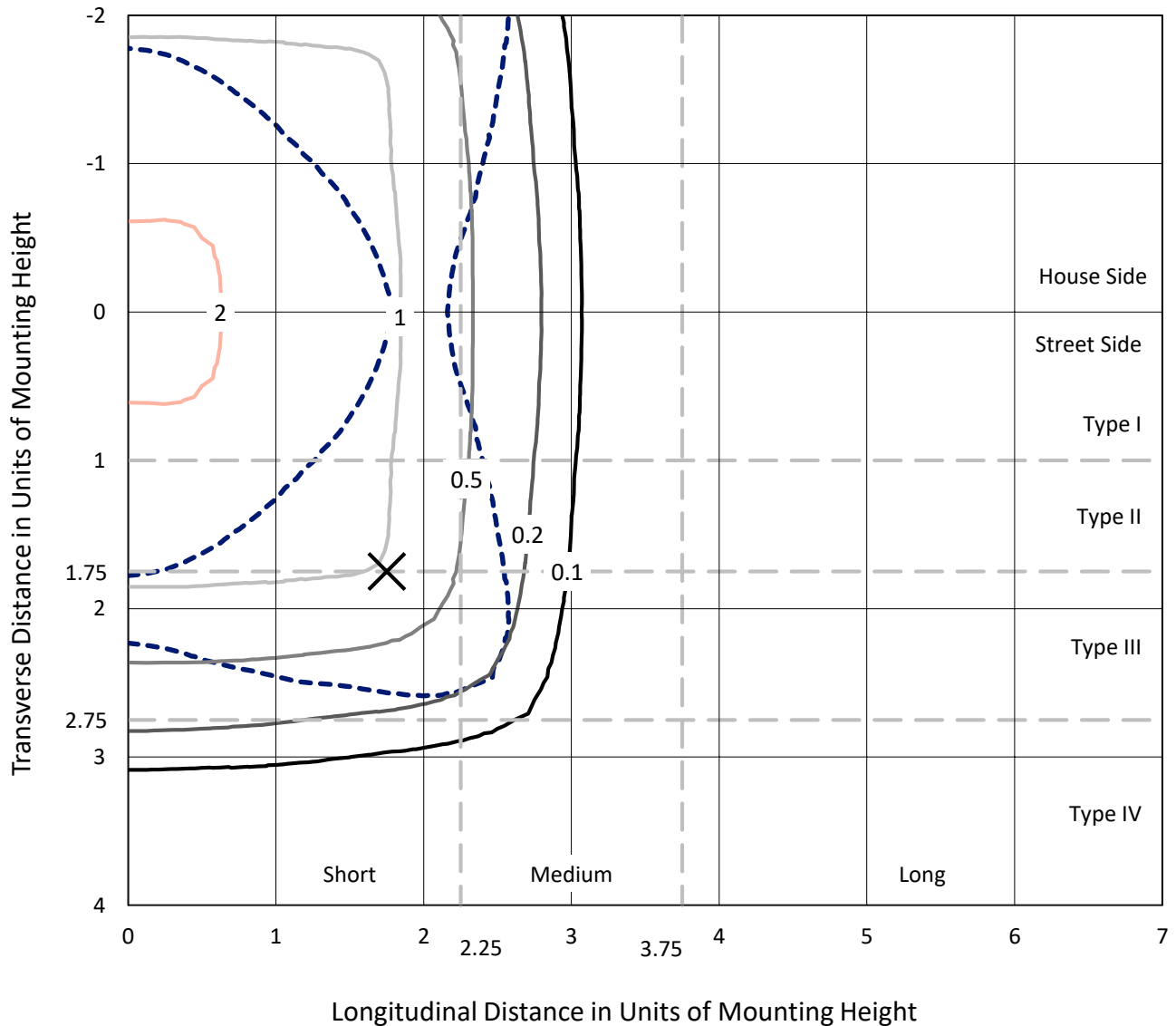


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

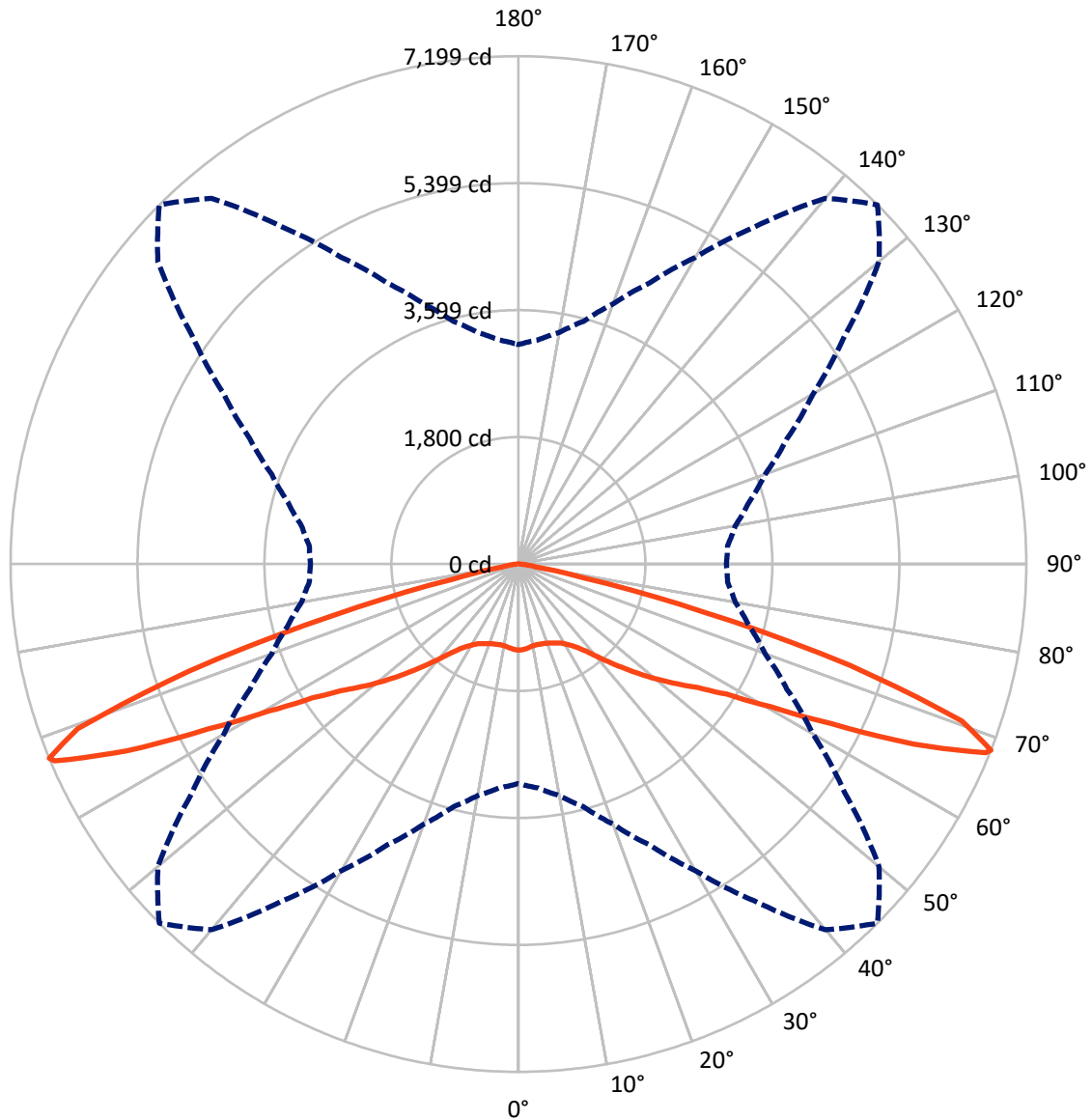


Based on 20 foot mounting height. Maximum calculated value = 3.1 fc
 Type V - Short - Full Cutoff

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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	6120.0	0.0	6120.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6120.0	0.0	6120.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	12240.1	0.0	12240.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.2	0.9
10°-20°	331.4	2.7
20°-30°	563.3	4.6
30°-40°	921.9	7.5
40°-50°	1647.5	13.5
50°-60°	2782.4	22.7
60°-70°	4314.5	35.2
70°-80°	1483.4	12.1
80°-90°	81.5	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°	12240.1	100.0
0°-180°	12240.1	100.0



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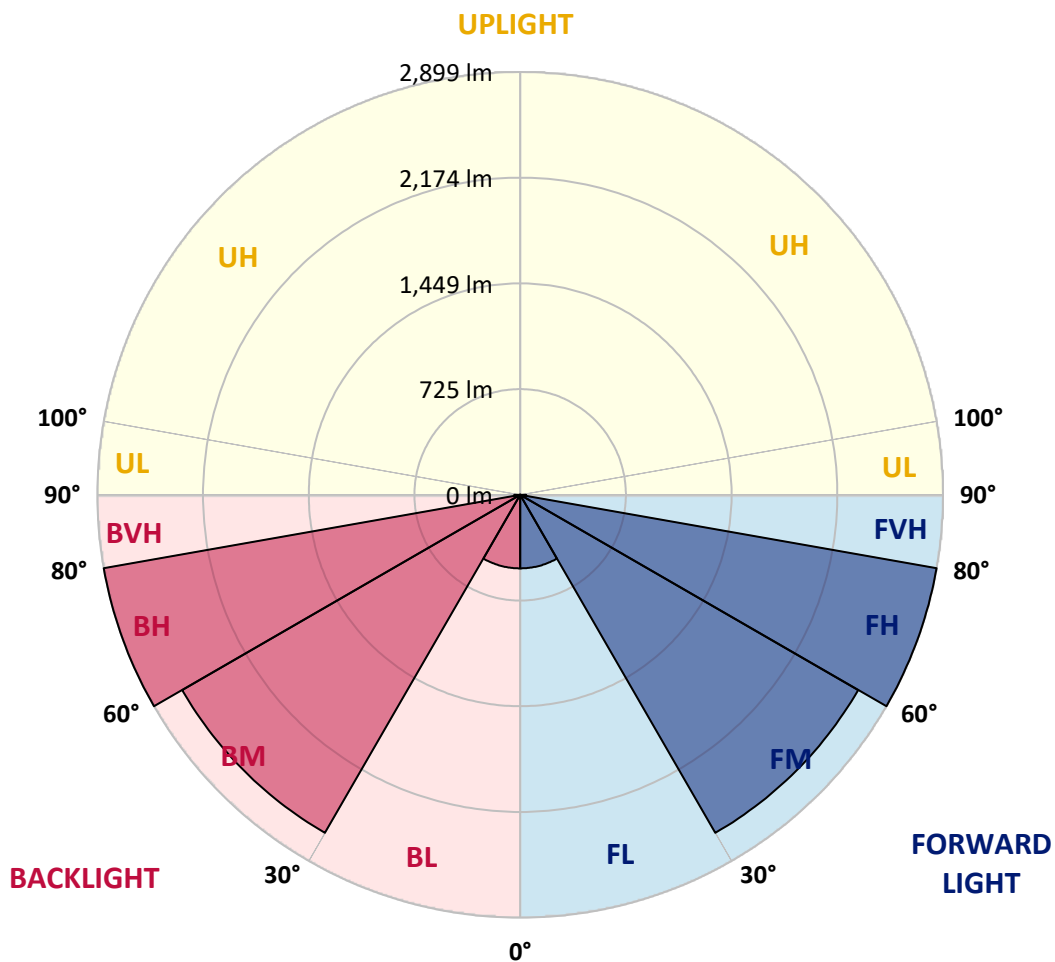
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	504.5	4.1			
FM	(30°-60°)	2675.9	21.9			
FH	(60°-80°)	2898.9	23.7			G2/5000
FVH	(80°-90°)	40.8	0.3			G1/100
BL	(0°-30°)	504.5	4.1	B2/1000		
BM	(30°-60°)	2675.9	21.9	B3/5000		
BH	(60°-80°)	2898.9	23.7	B4/5000		G2/5000
BVH	(80°-90°)	40.8	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°	1220.9	1220.9	1220.9	1220.9	1220.9	1220.9	1220.9	1220.9	1220.9	1220.9	1220.9
2.5°	1226.2	1226.2	1227.8	1226.9	1224.7	1222.5	1220.3	1218.0	1216.5	1215.0	1213.5
5°	1213.5	1213.5	1215.8	1214.1	1212.7	1210.5	1208.9	1206.8	1205.3	1203.8	1204.4
7.5°	1197.0	1198.5	1200.0	1199.2	1196.3	1195.6	1193.3	1192.5	1191.1	1188.7	1189.4
10°	1182.8	1183.4	1185.0	1184.2	1183.4	1181.2	1180.6	1179.7	1179.0	1176.1	1175.3
12.5°	1168.5	1170.0	1171.5	1172.3	1171.5	1172.3	1172.9	1173.7	1172.9	1171.5	1171.5
15°	1157.2	1158.8	1161.0	1163.2	1164.1	1168.5	1171.5	1174.5	1176.8	1177.5	1175.3
17.5°	1151.3	1153.6	1156.5	1161.0	1164.7	1170.0	1175.3	1179.7	1183.4	1184.2	1182.0
20°	1150.5	1152.7	1157.2	1162.5	1169.2	1176.1	1184.2	1191.1	1194.7	1197.0	1194.7
22.5°	1155.8	1158.8	1164.7	1171.5	1179.7	1188.7	1199.2	1206.8	1214.1	1217.3	1215.0
25°	1170.9	1173.7	1180.6	1188.7	1197.7	1208.9	1219.4	1229.2	1236.7	1240.5	1237.4
27.5°	1202.2	1203.0	1210.5	1219.4	1230.0	1239.8	1253.2	1257.6	1263.6	1267.5	1263.6
30°	1246.5	1247.9	1254.8	1268.9	1278.6	1291.5	1298.9	1303.4	1310.2	1314.0	1309.4
32.5°	1314.0	1315.4	1321.4	1334.9	1344.0	1353.7	1362.6	1365.7	1372.4	1376.9	1371.6
35°	1409.1	1412.1	1417.3	1426.4	1433.9	1441.3	1448.1	1445.8	1450.4	1456.3	1451.1
37.5°	1539.5	1538.7	1540.2	1547.1	1554.5	1559.0	1569.5	1564.3	1568.8	1574.0	1571.0
40°	1691.7	1691.7	1690.9	1702.9	1705.9	1710.5	1721.7	1715.0	1721.0	1726.9	1721.7
42.5°	1864.8	1867.8	1871.6	1881.3	1889.6	1891.0	1896.3	1893.3	1900.9	1906.1	1900.9
45°	2064.1	2068.6	2073.2	2095.7	2099.3	2102.5	2106.2	2096.5	2104.6	2109.2	2107.7
47.5°	2271.1	2279.3	2289.1	2312.2	2327.2	2334.1	2337.0	2325.8	2326.5	2333.3	2334.1
50°	2505.0	2513.9	2523.7	2549.8	2564.1	2576.1	2579.9	2567.1	2568.7	2573.9	2575.4
52.5°	2720.7	2731.2	2752.2	2787.5	2807.7	2828.8	2830.2	2814.5	2821.2	2825.0	2821.9
55°	2924.0	2937.4	2965.1	3012.3	3049.0	3090.3	3109.0	3091.7	3091.7	3088.8	3087.4
57.5°	3160.7	3175.8	3204.3	3259.0	3310.0	3369.2	3420.0	3437.4	3468.9	3479.3	3462.8
60°	3517.6	3533.3	3562.5	3634.5	3699.0	3785.1	3869.1	3937.4	4048.2	4108.2	4054.2
62.5°	3843.6	3867.6	3936.6	4062.4	4201.8	4361.5	4546.6	4678.6	4880.2	4980.7	4845.0
65°	3769.4	3818.1	3953.0	4150.9	4438.7	4785.0	5162.0	5524.0	5940.9	6154.4	5878.6
67.5°	3292.6	3333.9	3479.3	3709.5	4068.5	4546.0	5132.0	5881.6	6741.3	7141.5	6653.6
68°	3110.6	3187.7	3332.4	3561.1	3923.1	4392.3	5018.1	5827.6	6766.0	7198.5	6671.5
70°	2385.0	2412.8	2551.4	2756.8	3147.3	3607.5	4239.3	5162.0	6222.6	6667.8	6125.9
72.5°	1133.3	1149.8	1239.8	1442.0	1690.3	2064.9	2622.6	3492.8	4448.4	4911.7	4371.2
75°	415.2	419.0	440.0	487.9	580.8	721.8	989.4	1530.5	2265.9	2702.0	2274.8
77.5°	224.0	224.8	233.1	245.1	261.5	280.4	320.9	430.2	694.1	944.4	733.0
80°	140.9	140.1	148.4	158.1	169.4	178.5	182.1	194.9	219.6	257.1	236.2
82.5°	72.0	78.7	97.5	107.9	124.4	127.4	123.6	122.9	130.4	140.9	145.4
85°	39.7	35.3	51.7	69.0	75.0	77.3	78.0	73.4	72.0	70.4	74.2
87.5°	20.2	18.8	22.5	34.5	36.7	30.0	30.7	26.2	18.0	18.0	18.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1220.9	1220.9	1220.9	1220.9	1220.9	1220.9	1220.9	1220.9
2.5°	1212.1	1212.7	1211.3	1211.3	1211.3	1212.1	1211.3	1210.5
5°	1202.2	1203.8	1203.8	1204.4	1205.3	1205.3	1205.3	1205.3
7.5°	1188.0	1188.7	1190.3	1190.3	1190.3	1190.3	1190.3	1190.3
10°	1174.5	1172.9	1172.3	1170.9	1170.9	1168.5	1169.2	1170.0
12.5°	1167.7	1164.7	1163.2	1161.0	1159.5	1157.2	1157.2	1158.0
15°	1170.9	1166.3	1161.8	1160.3	1158.8	1157.2	1155.8	1156.5
17.5°	1176.8	1171.5	1166.3	1163.2	1160.3	1158.0	1157.2	1158.0
20°	1189.4	1182.0	1173.7	1168.5	1162.5	1161.0	1158.8	1161.0
22.5°	1206.8	1197.7	1187.3	1177.5	1170.9	1167.7	1164.7	1167.0
25°	1227.8	1218.0	1207.5	1196.3	1188.7	1186.5	1182.8	1182.8
27.5°	1257.0	1248.7	1239.8	1229.2	1221.8	1219.4	1213.5	1213.5
30°	1303.4	1295.1	1286.9	1278.0	1270.5	1268.1	1260.7	1260.7
32.5°	1364.9	1355.9	1350.6	1343.1	1337.1	1333.4	1324.5	1323.7
35°	1447.3	1439.1	1438.4	1433.1	1427.0	1427.9	1418.9	1417.3
37.5°	1565.7	1559.0	1561.3	1556.8	1551.6	1556.0	1550.7	1550.7
40°	1717.2	1715.0	1717.2	1714.1	1715.0	1715.7	1711.2	1712.7
42.5°	1900.1	1894.0	1907.6	1906.1	1903.8	1909.7	1899.2	1891.8
45°	2110.7	2108.4	2121.9	2124.1	2119.7	2123.5	2104.6	2103.9
47.5°	2339.2	2339.2	2351.3	2349.7	2345.3	2346.1	2323.6	2309.4
50°	2577.6	2576.1	2588.1	2585.1	2579.2	2578.3	2555.1	2540.9
52.5°	2825.7	2825.7	2843.0	2834.7	2820.5	2813.8	2785.3	2766.5
55°	3100.1	3096.3	3101.6	3074.5	3046.8	3026.6	2991.4	2977.2
57.5°	3447.1	3403.6	3366.0	3331.6	3292.6	3268.8	3227.5	3212.5
60°	3939.5	3823.4	3773.2	3704.3	3639.8	3607.5	3552.7	3523.5
62.5°	4621.6	4429.0	4292.6	4140.4	3993.4	3890.1	3806.8	3770.1
65°	5410.1	4990.4	4643.2	4317.3	4040.7	3821.1	3699.0	3660.8
67.5°	5709.8	4939.4	4340.5	3872.9	3537.0	3275.4	3129.2	3098.6
68°	5646.1	4822.6	4200.4	3721.4	3384.2	3120.4	2974.8	2947.2
70°	4980.7	4068.5	3411.9	2935.1	2620.4	2369.3	2266.6	2222.3
72.5°	3395.4	2612.9	2004.3	1603.2	1367.8	1208.9	1114.5	1082.3
75°	1562.8	1056.0	705.3	526.9	447.4	409.3	380.1	372.4
77.5°	455.7	331.3	284.9	263.8	248.1	234.5	224.8	224.0
80°	216.6	203.1	197.1	183.7	169.4	156.7	147.6	149.2
82.5°	145.4	141.7	141.7	128.2	105.7	90.6	75.0	67.5
85°	77.3	80.2	84.7	80.2	69.7	51.7	33.7	36.7
87.5°	26.2	30.0	31.5	30.7	27.8	21.0	15.7	15.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)