

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: P198805

Luminaire Tested: **XNV2-AF-02-LED-U-5MQ-7050-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198805  
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-7050-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 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: 10376 lumens  
Efficiency: N/A  
Efficacy: 122.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - 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

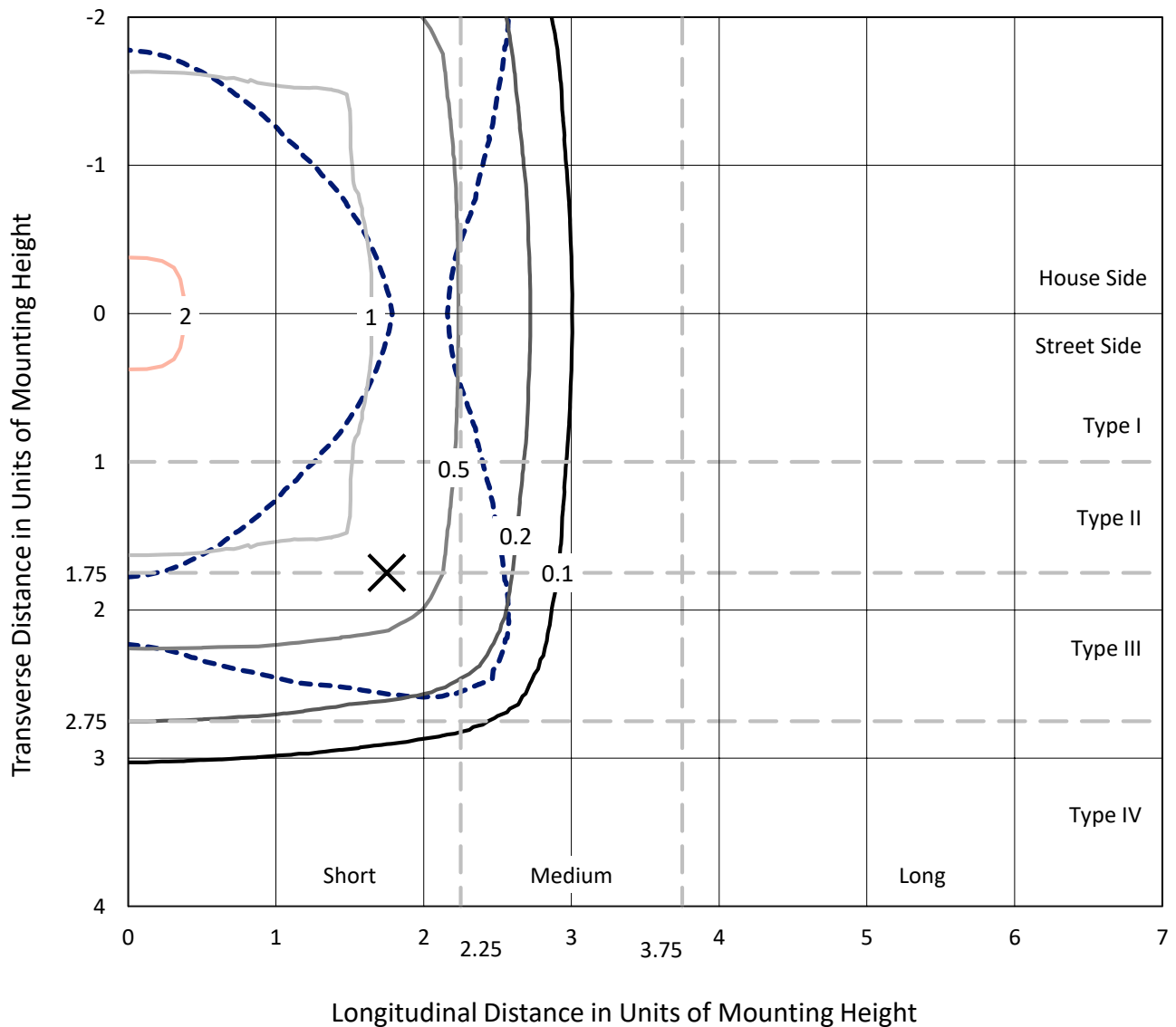


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### Iso-Footcandle Lines of Horizontal Illumination

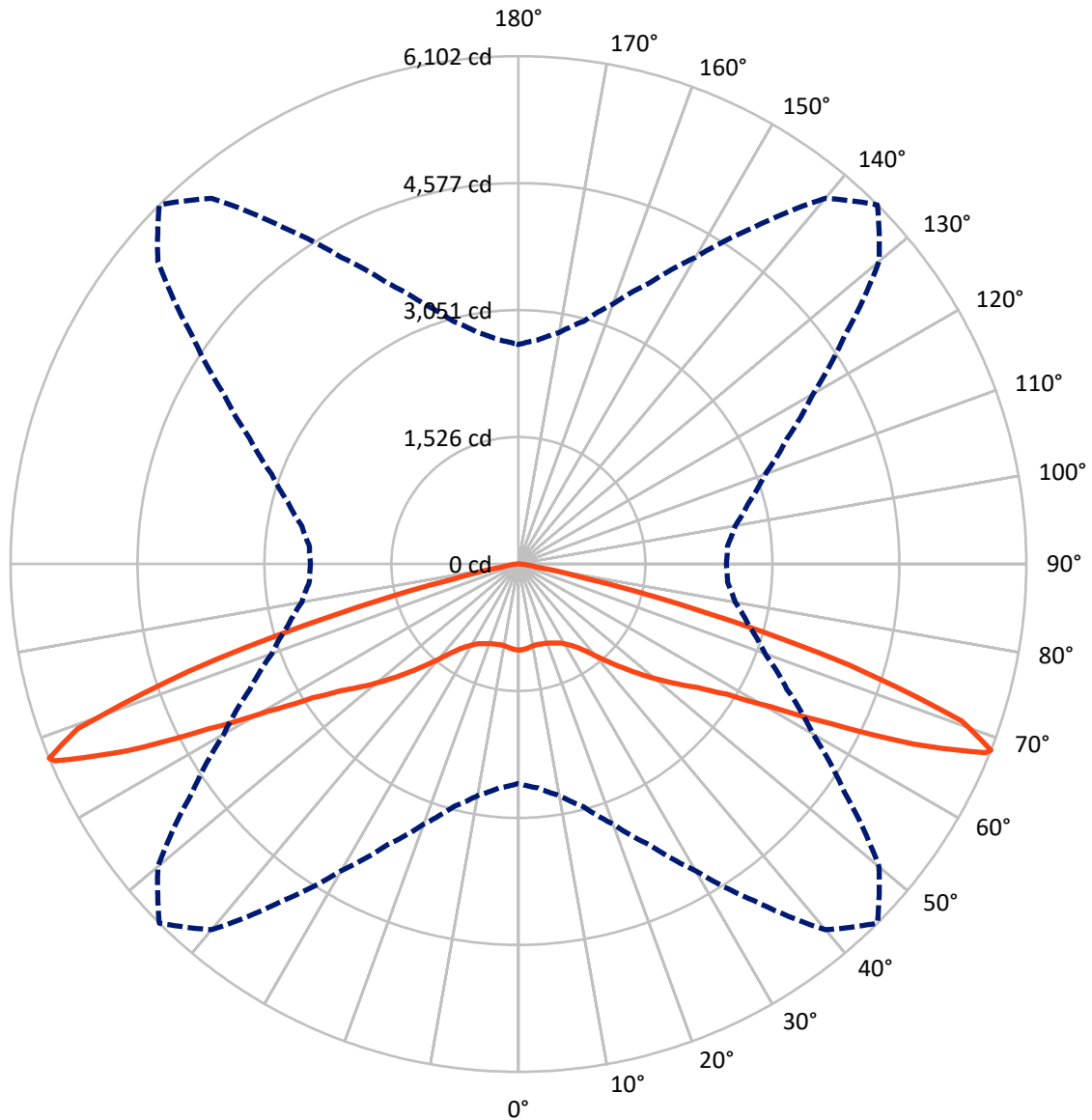
× Max cd  
 - - - 1/2 Max cd



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
<b>House Side</b>	Lumens	5188.0	0.0	5188.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	5188.0	0.0	5188.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	10376.0	0.0	10376.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.8	0.9
10°-20°	280.9	2.7
20°-30°	477.5	4.6
30°-40°	781.5	7.5
40°-50°	1396.6	13.5
50°-60°	2358.6	22.7
60°-70°	3657.4	35.2
70°-80°	1257.5	12.1
80°-90°	69.1	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°	10376.0	100.0
0°-180°	10376.0	100.0



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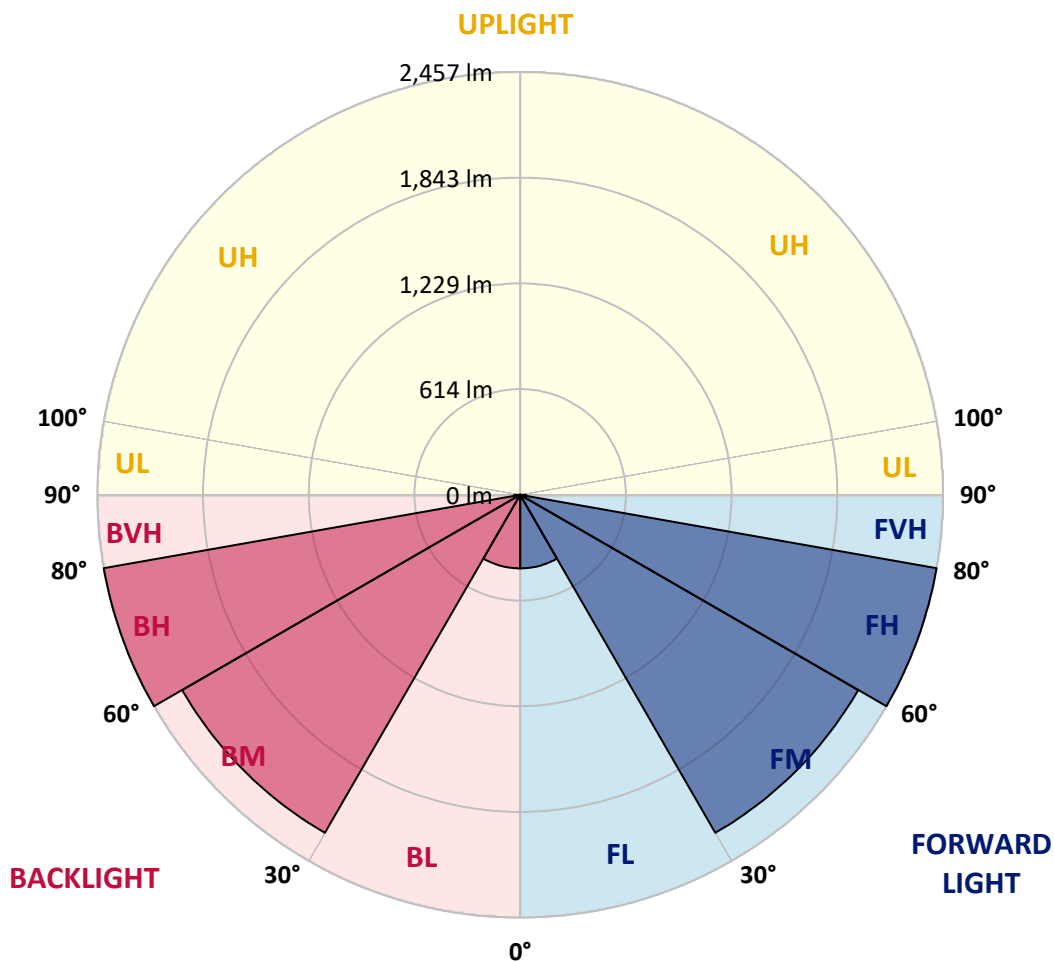
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	427.6	4.1			
FM (30°-60°)	2268.4	21.9			
FH (60°-80°)	2457.4	23.7			G2/5000
FVH (80°-90°)	34.6	0.3			G1/100
BL (0°-30°)	427.6	4.1	B1/500		
BM (30°-60°)	2268.4	21.9	B2/2500		
BH (60°-80°)	2457.4	23.7	B3/2500		G2/5000
BVH (80°-90°)	34.6	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1035.0	1035.0	1035.0	1035.0	1035.0	1035.0	1035.0	1035.0	1035.0	1035.0	1035.0
2.5°	1039.5	1039.5	1040.8	1040.1	1038.2	1036.3	1034.4	1032.5	1031.2	1030.0	1028.7
5°	1028.7	1028.7	1030.6	1029.3	1028.0	1026.1	1024.9	1023.0	1021.7	1020.4	1021.1
7.5°	1014.7	1016.0	1017.2	1016.6	1014.1	1013.4	1011.5	1010.9	1009.6	1007.7	1008.4
10°	1002.6	1003.3	1004.5	1003.9	1003.3	1001.4	1000.7	1000.1	999.5	996.9	996.3
12.5°	990.6	991.8	993.1	993.7	993.1	993.7	994.4	995.0	994.4	993.1	993.1
15°	981.0	982.3	984.2	986.1	986.7	990.6	993.1	995.6	997.5	998.2	996.3
17.5°	975.9	977.9	980.4	984.2	987.4	991.8	996.3	1000.1	1003.3	1003.9	1002.0
20°	975.3	977.2	981.0	985.5	991.2	996.9	1003.9	1009.6	1012.8	1014.7	1012.8
22.5°	979.8	982.3	987.4	993.1	1000.1	1007.7	1016.6	1023.0	1029.3	1031.9	1030.0
25°	992.5	995.0	1000.7	1007.7	1015.3	1024.9	1033.8	1042.0	1048.4	1051.6	1049.0
27.5°	1019.2	1019.8	1026.1	1033.8	1042.7	1050.9	1062.4	1066.2	1071.3	1074.4	1071.3
30°	1056.6	1057.9	1063.6	1075.7	1084.0	1094.8	1101.1	1104.9	1110.6	1113.8	1110.0
32.5°	1113.8	1115.1	1120.2	1131.6	1139.2	1147.5	1155.1	1157.7	1163.4	1167.2	1162.7
35°	1194.5	1197.1	1201.5	1209.1	1215.5	1221.8	1227.6	1225.7	1229.5	1234.5	1230.1
37.5°	1305.1	1304.4	1305.7	1311.4	1317.8	1321.6	1330.5	1326.0	1329.9	1334.3	1331.8
40°	1434.1	1434.1	1433.4	1443.6	1446.1	1449.9	1459.5	1453.8	1458.8	1463.9	1459.5
42.5°	1580.8	1583.4	1586.5	1594.8	1601.8	1603.1	1607.5	1605.0	1611.3	1615.8	1611.3
45°	1749.8	1753.7	1757.5	1776.5	1779.7	1782.2	1785.4	1777.2	1784.2	1788.0	1786.7
47.5°	1925.2	1932.2	1940.5	1960.2	1972.9	1978.6	1981.1	1971.6	1972.2	1977.9	1978.6
50°	2123.4	2131.1	2139.3	2161.6	2173.6	2183.8	2187.0	2176.2	2177.5	2181.9	2183.2
52.5°	2306.4	2315.3	2333.1	2363.0	2380.1	2397.9	2399.2	2385.9	2391.6	2394.8	2392.2
55°	2478.6	2490.1	2513.6	2553.6	2584.7	2619.7	2635.6	2620.9	2620.9	2618.4	2617.1
57.5°	2679.4	2692.1	2716.3	2762.6	2805.8	2856.0	2899.2	2913.9	2940.5	2949.4	2935.5
60°	2981.8	2995.2	3020.0	3081.0	3135.6	3208.7	3279.8	3337.7	3431.7	3482.5	3436.8
62.5°	3258.2	3278.6	3337.0	3443.8	3562.0	3697.3	3854.2	3966.1	4137.0	4222.1	4107.1
65°	3195.3	3236.6	3351.0	3518.7	3762.7	4056.3	4375.9	4682.8	5036.0	5217.1	4983.3
67.5°	2791.2	2826.2	2949.4	3144.5	3448.9	3853.6	4350.5	4985.8	5714.6	6053.9	5640.3
68°	2636.8	2702.3	2824.9	3018.7	3325.6	3723.3	4253.9	4940.1	5735.6	6102.2	5655.5
70°	2021.8	2045.3	2162.8	2336.9	2668.0	3058.1	3593.7	4375.9	5274.9	5652.4	5193.0
72.5°	960.7	974.7	1050.9	1222.5	1432.8	1750.5	2223.2	2960.9	3771.0	4163.7	3705.5
75°	352.0	355.2	373.0	413.6	492.4	611.9	838.7	1297.4	1920.8	2290.6	1928.4
77.5°	190.0	190.6	197.6	207.8	221.7	237.6	271.9	364.7	588.4	800.6	621.4
80°	119.5	118.8	125.8	134.1	143.6	151.2	154.4	165.2	186.2	217.9	200.1
82.5°	61.0	66.7	82.6	91.5	105.5	108.0	104.8	104.2	110.6	119.5	123.3
85°	33.7	29.9	43.8	58.5	63.5	65.4	66.1	62.3	61.0	59.7	62.9
87.5°	17.2	15.9	19.1	29.2	31.1	25.4	26.1	22.2	15.2	15.2	15.9
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°	1035.0	1035.0	1035.0	1035.0	1035.0	1035.0	1035.0	1035.0
2.5°	1027.4	1028.0	1026.8	1026.8	1026.8	1027.4	1026.8	1026.1
5°	1019.2	1020.4	1020.4	1021.1	1021.7	1021.7	1021.7	1021.7
7.5°	1007.1	1007.7	1009.0	1009.0	1009.0	1009.0	1009.0	1009.0
10°	995.6	994.4	993.7	992.5	992.5	990.6	991.2	991.8
12.5°	989.9	987.4	986.1	984.2	982.9	981.0	981.0	981.7
15°	992.5	988.7	984.8	983.6	982.3	981.0	979.8	980.4
17.5°	997.5	993.1	988.7	986.1	983.6	981.7	981.0	981.7
20°	1008.4	1002.0	995.0	990.6	985.5	984.2	982.3	984.2
22.5°	1023.0	1015.3	1006.4	998.2	992.5	989.9	987.4	989.3
25°	1040.8	1032.5	1023.6	1014.1	1007.7	1005.8	1002.6	1002.6
27.5°	1065.5	1058.5	1050.9	1042.0	1035.7	1033.8	1028.7	1028.7
30°	1104.9	1097.9	1091.0	1083.3	1077.0	1075.1	1068.7	1068.7
32.5°	1157.0	1149.4	1145.0	1138.6	1133.5	1130.3	1122.7	1122.1
35°	1226.9	1219.9	1219.3	1214.8	1209.8	1210.4	1202.8	1201.5
37.5°	1327.3	1321.6	1323.5	1319.7	1315.2	1319.1	1314.6	1314.6
40°	1455.7	1453.8	1455.7	1453.1	1453.8	1454.4	1450.6	1451.8
42.5°	1610.7	1605.6	1617.0	1615.8	1613.9	1619.0	1610.1	1603.7
45°	1789.2	1787.3	1798.8	1800.7	1796.9	1800.0	1784.2	1783.5
47.5°	1983.0	1983.0	1993.2	1991.9	1988.1	1988.7	1969.7	1957.6
50°	2185.1	2183.8	2194.0	2191.4	2186.3	2185.7	2166.0	2153.9
52.5°	2395.4	2395.4	2410.0	2403.0	2390.9	2385.2	2361.1	2345.2
55°	2627.9	2624.8	2629.2	2606.3	2582.8	2565.7	2535.8	2523.7
57.5°	2922.1	2885.3	2853.5	2824.3	2791.2	2770.9	2736.0	2723.2
60°	3339.6	3241.1	3198.5	3140.1	3085.4	3058.1	3011.7	2986.9
62.5°	3917.8	3754.5	3638.8	3509.8	3385.3	3297.6	3227.1	3196.0
65°	4586.2	4230.4	3936.2	3659.8	3425.3	3239.2	3135.6	3103.2
67.5°	4840.3	4187.2	3679.5	3283.0	2998.4	2776.6	2652.7	2626.7
68°	4786.3	4088.0	3560.7	3154.7	2868.7	2645.1	2521.8	2498.3
70°	4222.1	3448.9	2892.3	2488.2	2221.3	2008.4	1921.4	1883.9
72.5°	2878.3	2214.9	1699.0	1359.1	1159.6	1024.9	944.8	917.5
75°	1324.8	895.3	597.9	446.7	379.3	346.9	322.1	315.8
77.5°	386.3	280.8	241.4	223.7	210.3	198.9	190.6	190.0
80°	183.6	172.2	167.1	155.7	143.6	132.8	125.2	126.4
82.5°	123.3	120.1	120.1	108.7	89.6	76.9	63.5	57.2
85°	65.4	68.0	71.8	68.0	59.1	43.8	28.6	31.1
87.5°	22.2	25.4	26.7	26.1	23.5	17.8	13.3	13.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)