

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: P195920

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P195920
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: NVN-AF-02-LED-U-5MQ-800
Description: NAVION 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: 10721.5 lumens
Efficiency: N/A
Efficacy: 126.1 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

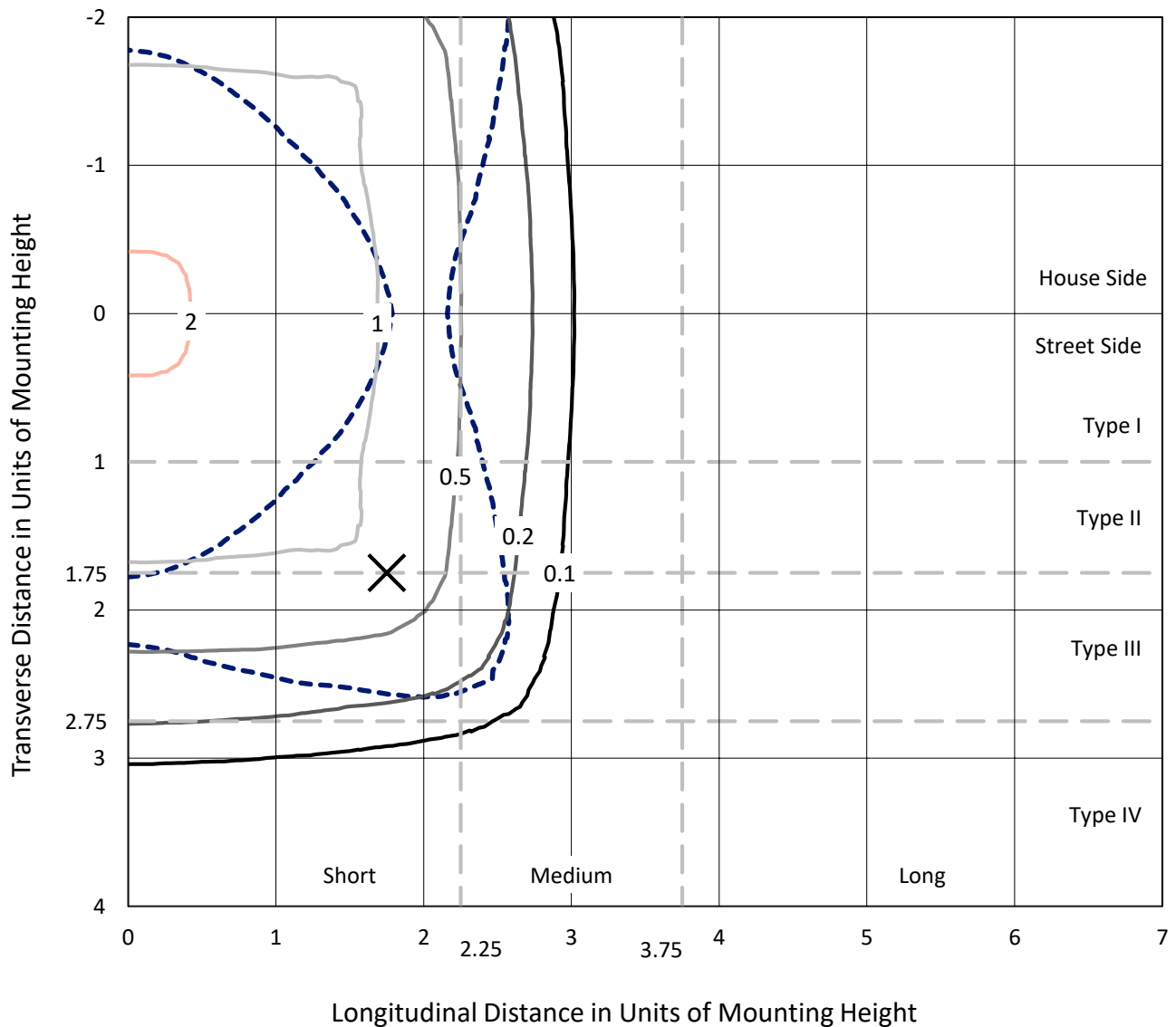
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P195920
 CATALOG NUMBER: NVN-AF-02-LED-U-5MQ-800

Iso-Footcandle Lines of Horizontal Illumination

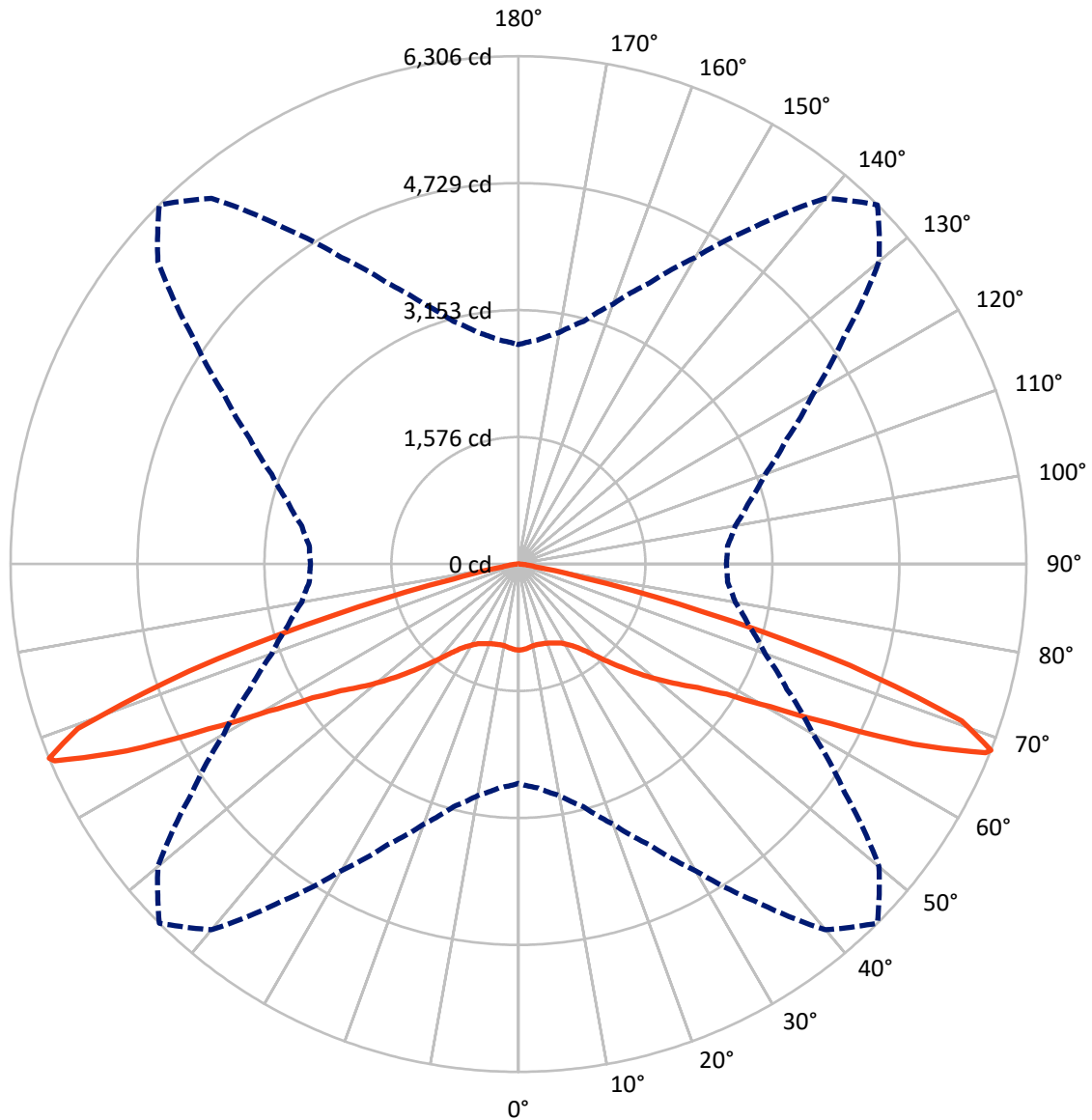
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.7 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P195920
CATALOG NUMBER: NVN-AF-02-LED-U-5MQ-800

Luminous Intensity Polar Plot



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

REPORT NUMBER: P195920

CATALOG NUMBER: NVN-AF-02-LED-U-5MQ-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5360.8	0.0	5360.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5360.8	0.0	5360.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	10721.5	0.0	10721.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.1	0.9
10°-20°	290.2	2.7
20°-30°	493.4	4.6
30°-40°	807.5	7.5
40°-50°	1443.1	13.5
50°-60°	2437.2	22.7
60°-70°	3779.2	35.2
70°-80°	1299.4	12.1
80°-90°	71.4	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°	10721.5	100.0
0°-180°	10721.5	100.0



REPORT NUMBER: P195920

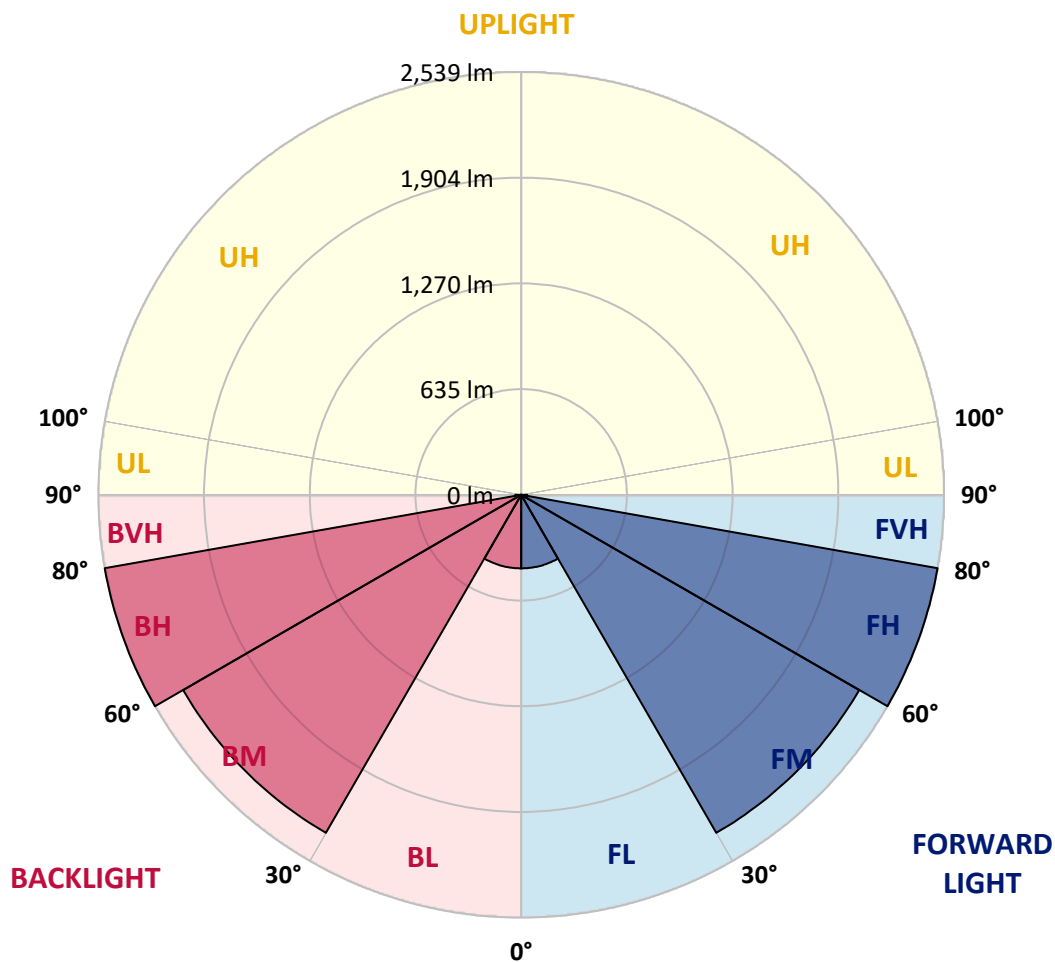
CATALOG NUMBER: NVN-AF-02-LED-U-5MQ-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	441.9	4.1			
FM	(30°-60°)	2343.9	21.9			
FH	(60°-80°)	2539.3	23.7			G2/5000
FVH	(80°-90°)	35.7	0.3			G1/100
BL	(0°-30°)	441.9	4.1	B1/500		
BM	(30°-60°)	2343.9	21.9	B2/2500		
BH	(60°-80°)	2539.3	23.7	B4/5000		G2/5000
BVH	(80°-90°)	35.7	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





REPORT NUMBER: P195920
 CATALOG NUMBER: NVN-AF-02-LED-U-5MQ-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1069.5	1069.5	1069.5	1069.5	1069.5	1069.5	1069.5	1069.5	1069.5	1069.5	1069.5
2.5°	1074.1	1074.1	1075.4	1074.7	1072.8	1070.8	1068.9	1066.8	1065.6	1064.3	1062.9
5°	1062.9	1062.9	1064.9	1063.6	1062.3	1060.3	1059.0	1057.0	1055.7	1054.4	1055.1
7.5°	1048.5	1049.9	1051.1	1050.5	1047.8	1047.2	1045.3	1044.5	1043.2	1041.3	1042.0
10°	1036.0	1036.7	1038.0	1037.4	1036.7	1034.7	1034.1	1033.4	1032.8	1030.1	1029.5
12.5°	1023.6	1024.9	1026.2	1026.8	1026.2	1026.8	1027.5	1028.2	1027.5	1026.2	1026.2
15°	1013.7	1015.0	1017.0	1019.0	1019.6	1023.6	1026.2	1028.8	1030.7	1031.4	1029.5
17.5°	1008.4	1010.4	1013.0	1017.0	1020.3	1024.9	1029.5	1033.4	1036.7	1037.4	1035.3
20°	1007.8	1009.8	1013.7	1018.2	1024.2	1030.1	1037.4	1043.2	1046.5	1048.5	1046.5
22.5°	1012.4	1015.0	1020.3	1026.2	1033.4	1041.3	1050.5	1057.0	1063.6	1066.2	1064.3
25°	1025.5	1028.2	1034.1	1041.3	1049.1	1059.0	1068.2	1076.8	1083.3	1086.6	1083.9
27.5°	1053.1	1053.7	1060.3	1068.2	1077.4	1086.0	1097.7	1101.7	1106.9	1110.2	1106.9
30°	1091.8	1093.1	1099.1	1111.5	1120.0	1131.2	1137.8	1141.7	1147.6	1150.9	1146.9
32.5°	1150.9	1152.3	1157.5	1169.3	1177.2	1185.7	1193.6	1196.2	1202.2	1206.1	1201.5
35°	1234.3	1237.0	1241.6	1249.4	1256.0	1262.5	1268.5	1266.5	1270.4	1275.6	1271.0
37.5°	1348.6	1347.8	1349.2	1355.1	1361.6	1365.6	1374.8	1370.2	1374.1	1378.7	1376.1
40°	1481.8	1481.8	1481.1	1491.7	1494.3	1498.2	1508.0	1502.2	1507.4	1512.6	1508.0
42.5°	1633.4	1636.1	1639.4	1647.9	1655.1	1656.5	1661.1	1658.4	1665.0	1669.6	1665.0
45°	1808.1	1812.1	1816.0	1835.7	1839.0	1841.6	1844.9	1836.3	1843.6	1847.6	1846.2
47.5°	1989.3	1996.5	2005.1	2025.4	2038.5	2044.5	2047.1	2037.2	2037.9	2043.9	2044.5
50°	2194.1	2202.0	2210.6	2233.5	2246.0	2256.5	2259.8	2248.7	2250.0	2254.6	2255.9
52.5°	2383.3	2392.5	2410.8	2441.7	2459.4	2477.8	2479.1	2465.3	2471.2	2474.5	2471.9
55°	2561.2	2573.0	2597.3	2638.6	2670.8	2706.9	2723.3	2708.3	2708.3	2705.6	2704.3
57.5°	2768.6	2781.8	2806.7	2854.6	2899.2	2951.1	2995.8	3010.9	3038.5	3047.7	3033.3
60°	3081.1	3094.9	3120.5	3183.5	3240.0	3315.5	3389.0	3448.8	3546.0	3598.5	3551.3
62.5°	3366.7	3387.7	3448.2	3558.4	3680.6	3820.4	3982.6	4098.1	4274.7	4362.7	4243.9
65°	3301.8	3344.4	3462.6	3636.0	3888.0	4191.3	4521.6	4838.8	5203.8	5390.8	5149.2
67.5°	2884.2	2920.3	3047.7	3249.2	3563.8	3981.9	4495.4	5151.9	5905.0	6255.5	5828.2
68°	2724.6	2792.2	2919.0	3119.2	3436.3	3847.3	4395.5	5104.6	5926.6	6305.5	5843.9
70°	2089.1	2113.4	2234.8	2414.8	2756.9	3159.9	3713.4	4521.6	5450.6	5840.6	5365.9
72.5°	992.7	1007.1	1086.0	1263.1	1480.5	1808.8	2297.2	3059.4	3896.6	4302.3	3828.9
75°	363.8	367.0	385.3	427.4	508.8	632.3	866.6	1340.7	1984.7	2366.8	1992.6
77.5°	196.3	196.9	204.2	214.7	229.1	245.5	281.0	376.9	607.9	827.3	642.1
80°	123.5	122.8	130.0	138.5	148.3	156.3	159.6	170.7	192.4	225.2	206.8
82.5°	63.0	68.9	85.3	94.5	108.9	111.6	108.3	107.7	114.3	123.5	127.4
85°	34.8	30.9	45.3	60.4	65.7	67.6	68.2	64.3	63.0	61.7	65.0
87.5°	17.7	16.4	19.7	30.2	32.1	26.3	26.9	23.0	15.8	15.8	16.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P195920

CATALOG NUMBER: NVN-AF-02-LED-U-5MQ-800

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1069.5	1069.5	1069.5	1069.5	1069.5	1069.5	1069.5	1069.5
2.5°	1061.6	1062.3	1061.0	1061.0	1061.0	1061.6	1061.0	1060.3
5°	1053.1	1054.4	1054.4	1055.1	1055.7	1055.7	1055.7	1055.7
7.5°	1040.6	1041.3	1042.6	1042.6	1042.6	1042.6	1042.6	1042.6
10°	1028.8	1027.5	1026.8	1025.5	1025.5	1023.6	1024.2	1024.9
12.5°	1022.8	1020.3	1019.0	1017.0	1015.7	1013.7	1013.7	1014.4
15°	1025.5	1021.6	1017.6	1016.3	1015.0	1013.7	1012.4	1013.0
17.5°	1030.7	1026.2	1021.6	1019.0	1016.3	1014.4	1013.7	1014.4
20°	1042.0	1035.3	1028.2	1023.6	1018.2	1017.0	1015.0	1017.0
22.5°	1057.0	1049.1	1039.9	1031.4	1025.5	1022.8	1020.3	1022.2
25°	1075.4	1066.8	1057.7	1047.8	1041.3	1039.3	1036.0	1036.0
27.5°	1101.0	1093.8	1086.0	1076.8	1070.2	1068.2	1062.9	1062.9
30°	1141.7	1134.6	1127.3	1119.4	1112.9	1110.8	1104.3	1104.3
32.5°	1195.5	1187.6	1183.0	1176.5	1171.3	1168.0	1160.1	1159.4
35°	1267.7	1260.6	1259.9	1255.3	1250.0	1250.8	1242.8	1241.6
37.5°	1371.5	1365.6	1367.6	1363.6	1359.0	1363.0	1358.4	1358.4
40°	1504.1	1502.2	1504.1	1501.5	1502.2	1502.8	1498.9	1500.2
42.5°	1664.3	1659.1	1670.9	1669.6	1667.6	1672.8	1663.7	1657.1
45°	1848.8	1846.8	1858.7	1860.6	1856.7	1860.0	1843.6	1842.9
47.5°	2049.1	2049.1	2059.6	2058.3	2054.3	2055.0	2035.3	2022.8
50°	2257.9	2256.5	2267.1	2264.4	2259.2	2258.5	2238.1	2225.6
52.5°	2475.1	2475.1	2490.3	2483.0	2470.5	2464.7	2439.7	2423.3
55°	2715.4	2712.1	2716.8	2693.1	2668.9	2651.1	2620.3	2607.8
57.5°	3019.4	2981.4	2948.6	2918.4	2884.2	2863.1	2827.0	2813.9
60°	3450.8	3349.0	3305.1	3244.6	3188.1	3159.9	3112.0	3086.4
62.5°	4048.2	3879.5	3760.1	3626.8	3498.1	3407.4	3334.6	3302.4
65°	4738.9	4371.3	4067.3	3781.6	3539.4	3347.1	3240.0	3206.5
67.5°	5001.5	4326.6	3802.0	3392.3	3098.2	2869.1	2741.1	2714.1
68°	4945.8	4224.2	3679.2	3259.7	2964.3	2733.2	2605.8	2581.5
70°	4362.7	3563.8	2988.6	2571.0	2295.3	2075.4	1985.3	1946.7
72.5°	2974.1	2288.8	1755.6	1404.3	1198.2	1059.0	976.3	948.1
75°	1368.9	925.1	617.8	461.6	392.0	358.4	332.9	326.3
77.5°	399.2	290.2	249.5	231.1	217.3	205.5	196.9	196.3
80°	189.8	177.9	172.7	160.8	148.3	137.2	129.3	130.6
82.5°	127.4	124.1	124.1	112.2	92.6	79.5	65.7	59.1
85°	67.6	70.3	74.2	70.3	61.1	45.3	29.6	32.1
87.5°	23.0	26.3	27.6	26.9	24.2	18.4	13.8	13.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)