

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: LUMARK

Report Number: P882046

Luminaire Tested: **NAV-SB1D-727-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882046
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-727-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6740 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

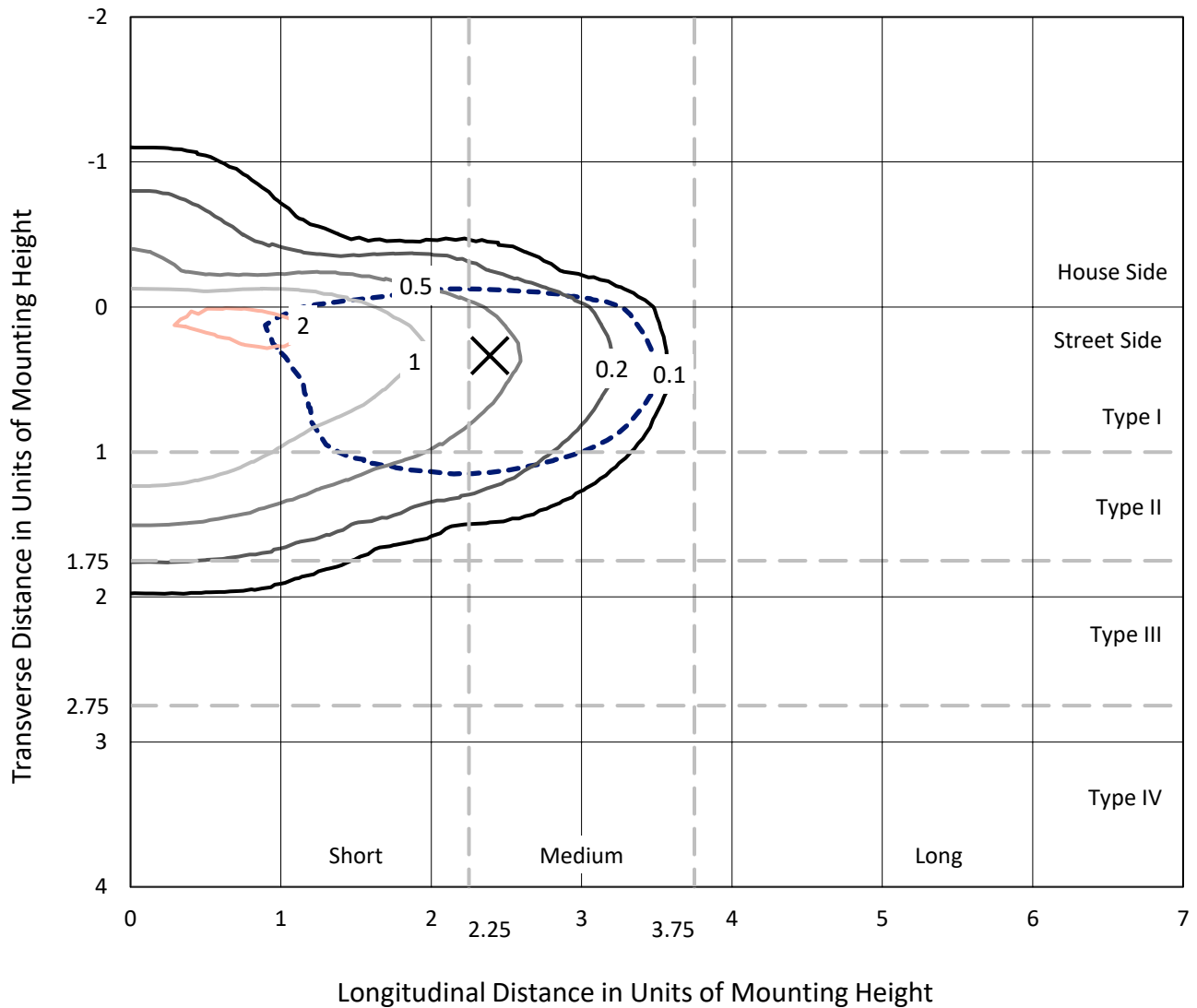
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882046
 CATALOG NUMBER: NAV-SB1D-727-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

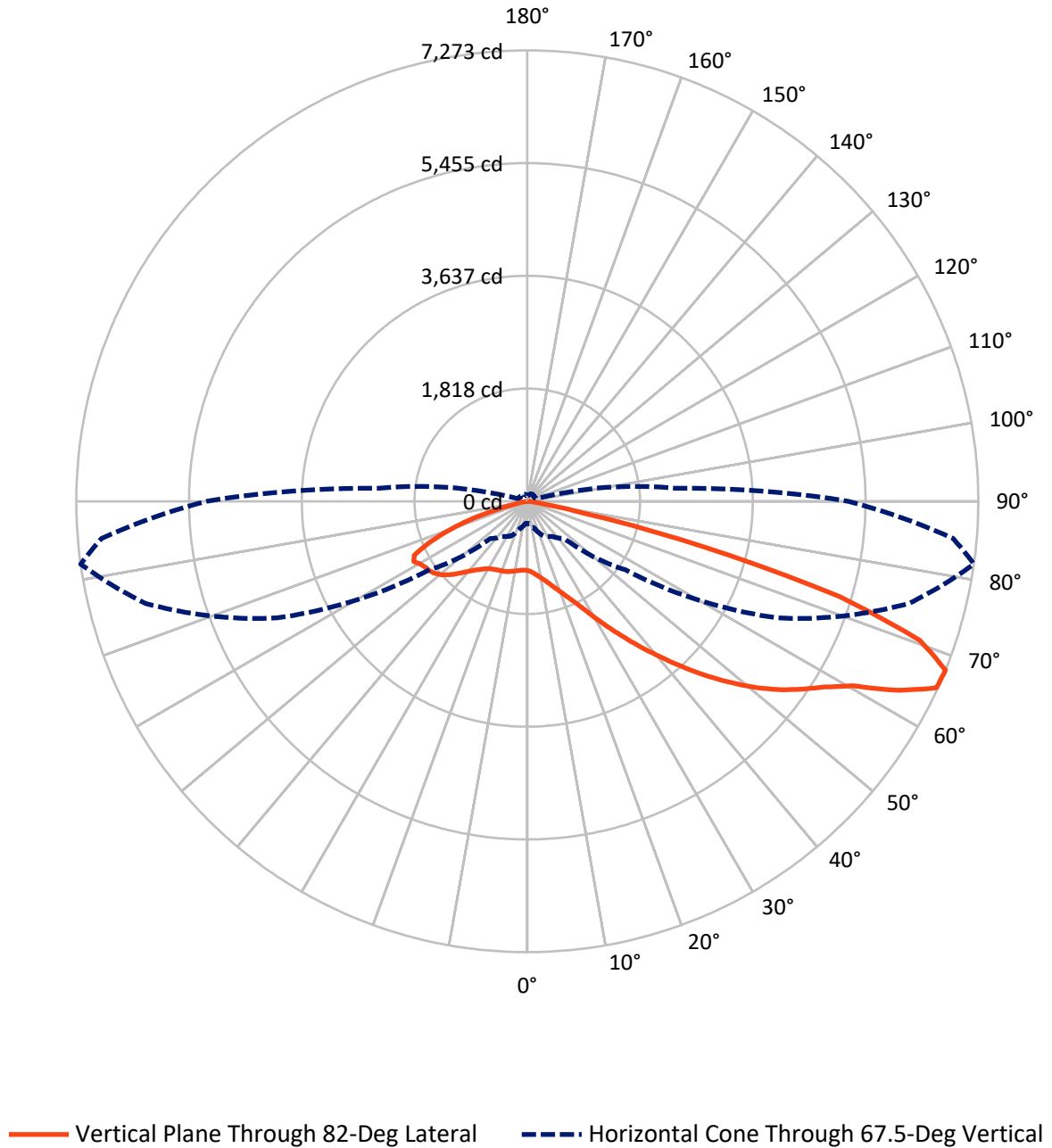
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc
 Type II - Medium - N/A

REPORT NUMBER: P882046
CATALOG NUMBER: NAV-SB1D-727-U-T2-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P882046

CATALOG NUMBER: NAV-SB1D-727-U-T2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1220.9	0.0	1220.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	5519.1	0.0	5519.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	6740.0	0.0	6740.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.5	1.5
10°-20°	258.5	3.8
20°-30°	414.0	6.1
30°-40°	732.2	10.9
40°-50°	1282.8	19.0
50°-60°	1710.9	25.4
60°-70°	1592.8	23.6
70°-80°	611.3	9.1
80°-90°	38.0	0.6
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°	6740.0	100.0
0°-180°	6740.0	100.0

Coefficient of Utilization



REPORT NUMBER: P882046

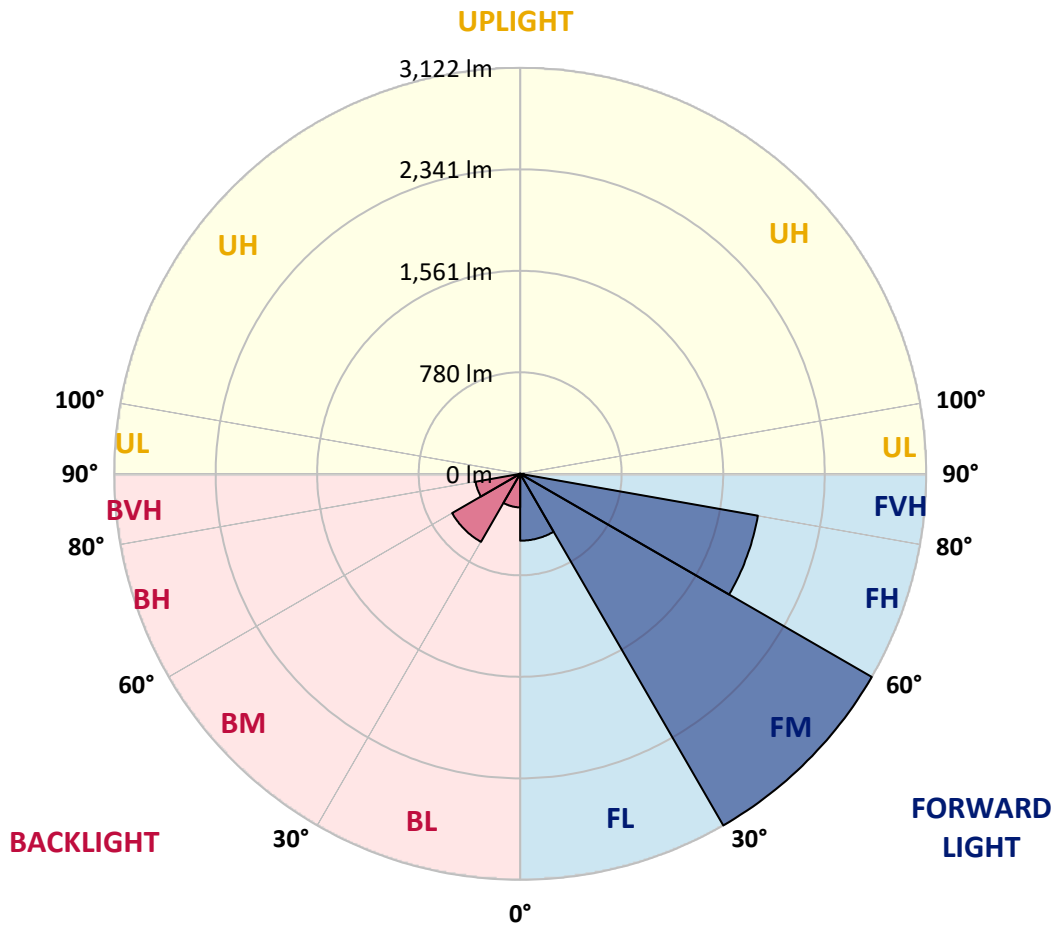
CATALOG NUMBER: NAV-SB1D-727-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	514.2	7.6			
FM (30°-60°)	3121.7	46.3			
FH (60°-80°)	1855.6	27.5			G2/5000
FVH (80°-90°)	27.6	0.4			G1/100
BL (0°-30°)	257.8	3.8	B1/500		
BM (30°-60°)	604.2	9.0	B1/1000		
BH (60°-80°)	348.5	5.2	B1/500		G1/500
BVH (80°-90°)	10.4	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



REPORT NUMBER: P882046

CATALOG NUMBER: NAV-SB1D-727-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1116.6	1116.6	1116.6	1116.6	1116.6	1116.6	1116.6	1116.6	1116.6	1116.6	1116.6
2.5°	1180.2	1187.0	1183.1	1181.1	1177.7	1172.9	1169.0	1156.9	1144.2	1136.0	1133.1
5°	1203.9	1210.7	1210.2	1212.2	1214.6	1216.1	1215.1	1201.5	1183.6	1169.5	1161.2
7.5°	1183.6	1191.3	1197.6	1207.3	1224.3	1242.3	1251.0	1248.1	1229.7	1210.2	1200.1
10°	1125.8	1134.1	1149.1	1171.9	1207.8	1246.6	1279.2	1294.2	1282.5	1261.2	1247.1
12.5°	1020.0	1028.3	1057.9	1107.4	1167.5	1235.0	1297.1	1337.4	1340.3	1318.9	1302.4
15°	901.1	909.4	940.9	1003.0	1094.8	1203.0	1306.8	1383.0	1408.7	1390.3	1370.4
17.5°	827.4	834.7	858.4	908.4	1004.0	1138.9	1303.4	1431.5	1490.2	1475.7	1451.9
20°	805.1	811.4	822.5	857.5	937.0	1072.4	1281.1	1477.1	1578.1	1569.8	1543.1
22.5°	828.8	834.7	838.0	853.6	903.6	1028.8	1252.9	1523.7	1680.0	1681.0	1648.4
25°	883.7	889.5	885.6	895.3	917.1	1015.2	1242.3	1578.6	1808.1	1818.8	1781.9
27.5°	973.9	974.4	965.2	964.7	968.1	1035.6	1253.4	1637.3	1969.7	1989.6	1944.0
30°	1154.9	1147.6	1112.2	1073.9	1056.4	1096.7	1284.5	1706.7	2160.4	2195.8	2138.6
32.5°	1434.0	1423.3	1358.3	1266.5	1174.3	1195.2	1340.3	1785.8	2368.1	2432.1	2362.3
35°	1736.8	1733.8	1665.9	1529.5	1368.4	1335.4	1431.0	1889.6	2594.7	2696.6	2613.6
37.5°	2018.2	2016.8	1977.9	1817.3	1621.3	1531.0	1576.6	2025.5	2837.3	2984.9	2886.8
40°	2275.4	2279.8	2240.9	2097.3	1899.8	1781.9	1774.6	2193.4	3107.1	3298.8	3182.4
42.5°	2497.6	2502.5	2463.2	2356.9	2174.9	2059.5	2017.7	2399.1	3370.6	3636.1	3498.3
45°	2648.6	2678.7	2672.8	2587.9	2457.4	2337.5	2309.9	2657.3	3671.0	3993.7	3832.1
47.5°	2691.3	2718.9	2762.6	2774.2	2694.7	2576.7	2609.7	2968.4	3974.8	4351.8	4167.9
50°	2586.0	2611.7	2702.4	2823.3	2878.6	2842.2	2901.4	3301.7	4285.8	4709.0	4497.4
52.5°	2378.3	2404.5	2519.0	2710.2	2935.8	3050.4	3194.0	3630.3	4587.2	5047.2	4809.4
55°	2077.9	2105.6	2252.6	2469.0	2826.7	3136.3	3438.1	3958.3	4863.3	5351.5	5090.9
57.5°	1669.3	1689.7	1842.5	2145.3	2552.0	3050.8	3618.1	4316.4	5123.4	5650.4	5369.9
60°	1088.0	1105.9	1283.5	1621.3	2096.8	2765.5	3654.0	4715.8	5468.9	6039.1	5746.0
62.5°	723.5	735.7	841.0	1088.9	1476.7	2217.7	3443.9	5034.6	5975.5	6715.6	6390.9
65°	496.4	508.6	613.9	786.6	954.0	1466.9	2839.8	4992.4	6434.6	7252.7	6868.9
67.5°	354.2	364.4	453.7	616.8	690.5	852.1	1925.0	4452.8	6368.6	7273.1	6894.6
70°	253.8	259.6	333.4	480.4	548.8	512.0	1070.5	3405.6	5576.2	6716.0	6369.6
72.5°	177.6	179.5	231.5	365.9	442.1	373.7	509.5	2270.5	4217.4	5271.4	4938.0
75°	120.3	122.8	155.8	268.4	354.7	285.3	269.8	1217.5	2475.8	2917.9	2615.6
77.5°	73.8	74.7	100.4	183.4	265.4	217.4	173.7	515.8	957.9	940.4	801.7
80°	41.7	41.7	64.1	114.0	181.0	140.2	121.8	219.3	303.3	266.4	234.9
82.5°	23.3	23.8	46.6	70.8	119.9	83.0	67.0	101.4	131.0	116.0	100.9
85°	9.7	10.7	28.6	33.5	57.3	41.2	27.2	42.7	48.5	43.2	31.5
87.5°	1.0	1.5	8.7	6.3	6.8	8.2	3.9	8.2	6.8	6.8	4.9
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: P882046

CATALOG NUMBER: NAV-SB1D-727-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1116.6	1116.6	1116.6	1116.6	1116.6	1116.6	1116.6	1116.6	1116.6	1116.6	1116.6
2.5°	1123.9	1116.6	1098.1	1076.8	1048.7	1035.1	1016.6	1004.0	993.3	994.3	984.6
5°	1145.7	1127.3	1086.0	1034.6	970.5	924.9	876.4	842.9	815.7	809.9	796.8
7.5°	1175.8	1146.7	1074.4	981.7	873.5	791.5	718.2	671.1	637.6	627.0	616.3
10°	1214.6	1172.4	1059.3	915.2	759.4	655.1	576.5	539.6	516.8	509.0	503.2
12.5°	1259.7	1202.0	1039.4	834.2	642.0	541.6	491.6	473.1	465.9	463.4	462.0
15°	1316.5	1238.9	1009.3	738.1	542.5	472.2	450.8	448.4	449.4	448.4	447.9
17.5°	1384.0	1279.2	960.3	639.1	475.6	436.7	429.0	430.9	433.3	432.9	431.9
20°	1457.7	1318.9	897.7	551.3	429.9	411.5	407.1	409.1	411.0	410.0	409.6
22.5°	1541.7	1361.6	828.3	482.8	399.4	388.2	383.4	383.8	383.8	381.9	380.9
25°	1642.1	1408.7	755.6	434.3	376.1	367.3	361.5	359.6	356.7	350.8	349.9
27.5°	1762.0	1458.7	685.7	400.3	357.6	349.4	342.6	337.7	330.5	320.8	319.8
30°	1896.9	1519.4	626.5	379.0	343.1	334.8	327.1	319.8	309.1	297.0	296.0
32.5°	2055.6	1584.4	583.3	364.9	330.0	321.2	312.0	303.3	291.6	279.5	280.0
35°	2244.8	1663.0	558.1	355.2	319.8	308.1	298.0	288.2	279.5	268.8	267.9
37.5°	2450.1	1746.5	550.3	350.4	313.0	295.0	283.4	276.6	275.6	269.3	268.8
40°	2674.8	1845.5	556.1	347.4	305.7	282.4	269.8	268.4	270.8	259.6	260.1
42.5°	2912.5	1962.9	565.8	344.1	295.5	269.8	257.7	257.7	255.7	240.2	240.2
45°	3169.7	2098.3	575.5	335.8	283.4	257.2	248.0	244.6	236.3	221.3	220.8
47.5°	3428.9	2236.1	582.8	320.8	268.8	246.5	238.3	230.5	218.4	204.8	204.3
50°	3674.9	2359.8	575.0	298.4	252.3	236.3	227.6	216.9	203.8	194.6	193.1
52.5°	3894.7	2467.1	542.0	272.2	234.9	225.6	217.9	206.7	196.0	186.3	185.4
55°	4085.9	2553.9	483.8	247.5	219.3	216.4	208.7	194.6	180.0	171.8	170.8
57.5°	4269.3	2619.9	411.0	227.1	205.3	206.2	194.6	182.0	168.4	159.7	158.7
60°	4513.4	2708.3	337.3	208.2	190.2	193.1	180.5	171.3	154.3	143.2	141.7
62.5°	4903.6	2845.6	267.9	184.9	172.8	173.7	168.4	157.2	136.8	123.7	122.8
65°	5213.2	2795.1	211.1	159.7	152.9	154.3	154.3	142.2	120.3	105.3	103.8
67.5°	5178.2	2393.3	168.4	134.9	133.9	134.9	138.3	128.1	106.8	94.6	92.7
70°	4770.1	1903.7	134.9	112.1	116.5	114.0	123.7	116.9	96.1	84.0	82.5
72.5°	3892.3	1371.4	102.9	92.7	89.3	93.2	111.6	105.3	80.1	66.5	65.0
75°	2274.4	731.8	76.7	73.3	64.5	77.6	99.0	89.8	61.1	49.0	47.6
77.5°	740.5	255.2	56.3	53.9	48.0	62.6	84.4	75.7	50.0	38.8	37.4
80°	198.5	77.2	38.3	35.4	31.1	46.6	67.0	60.2	35.9	25.2	24.7
82.5°	79.6	32.5	22.3	19.9	17.0	32.0	52.9	48.5	26.7	16.0	16.0
85°	25.7	10.7	8.2	6.3	7.8	19.9	31.5	33.0	18.9	8.2	6.3
87.5°	3.4	1.5	1.5	1.9	1.5	3.4	9.7	9.2	5.3	1.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)