

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: P959770

Luminaire Tested: **NAV-SB1B-727-U-T3R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959770  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1B-727-U-T3R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5498.1 lumens  
Efficiency: N/A  
Efficacy: 138.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1

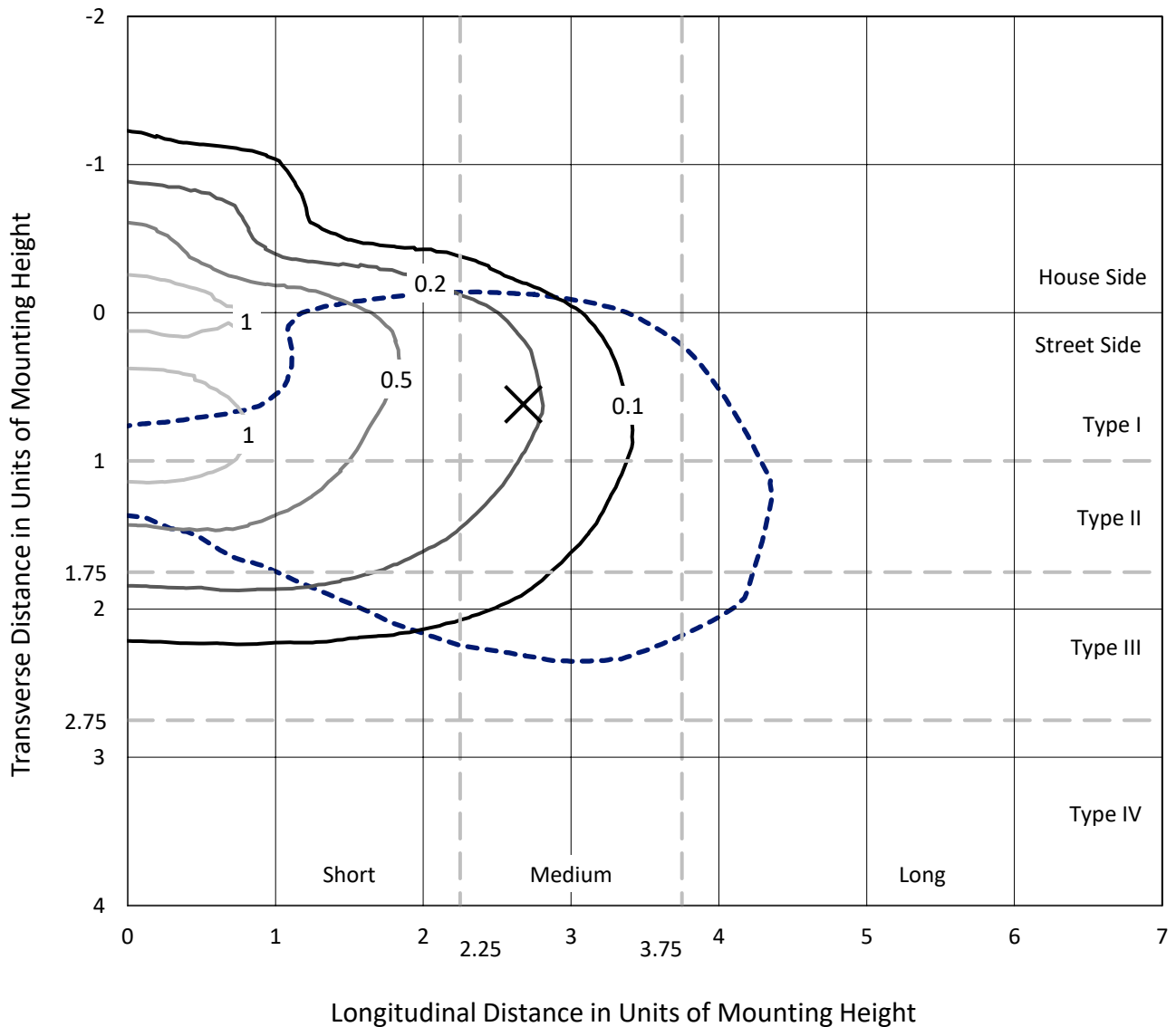
Input Watts (W): 39.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P959770  
 CATALOG NUMBER: NAV-SB1B-727-U-T3R

### Iso-Footcandle Lines of Horizontal Illumination

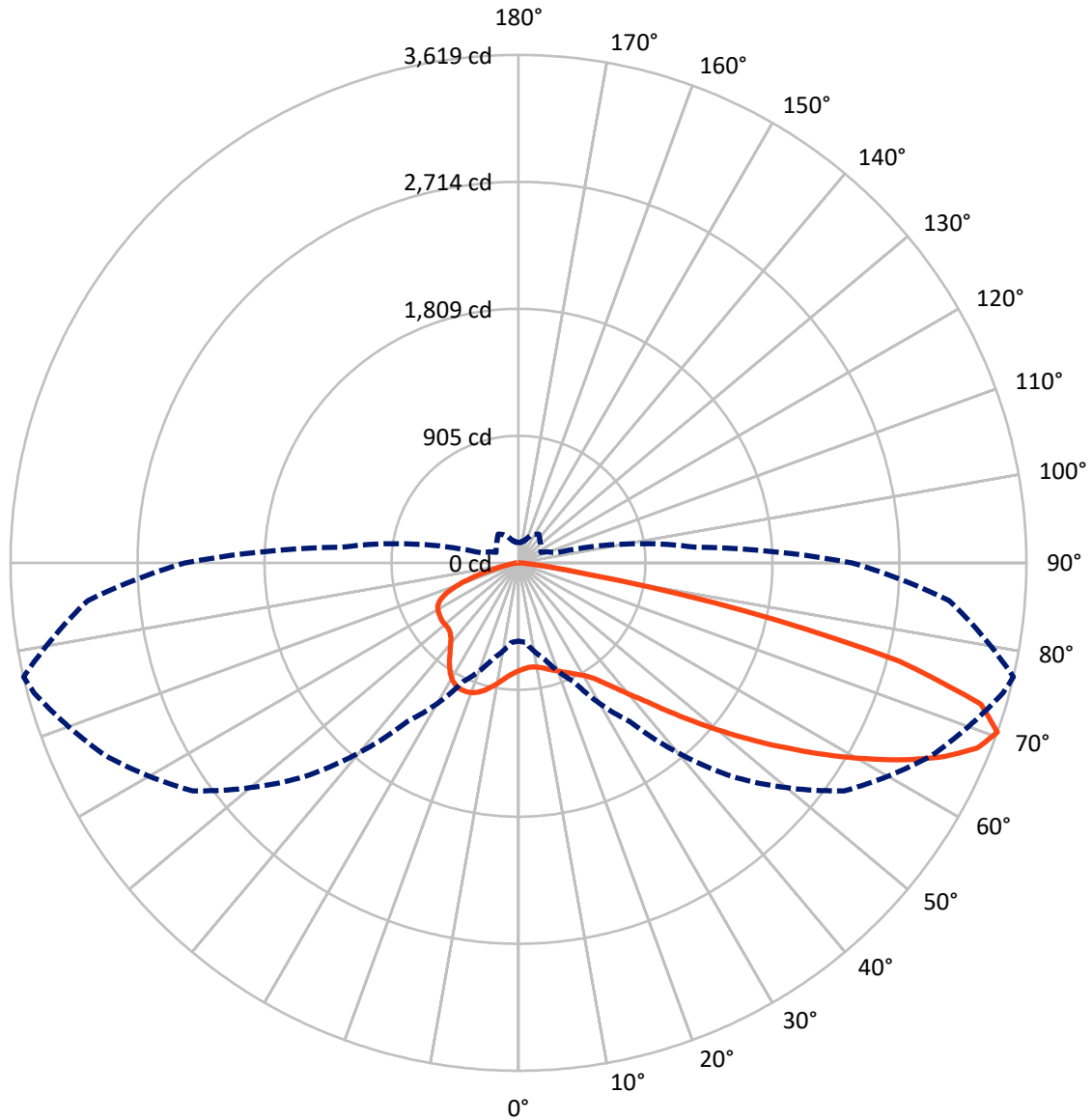
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc  
 Type III - Medium - N/A

REPORT NUMBER: P959770  
CATALOG NUMBER: NAV-SB1B-727-U-T3R

### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P959770  
 CATALOG NUMBER: NAV-SB1B-727-U-T3R

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1204.0	0.0	1204.0
	% Fixture	21.9	0.0	21.9
<b>Street Side</b>	Lumens	4294.1	0.0	4294.1
	% Fixture	78.1	0.0	78.1
<b>Total</b>	Lumens	5498.1	0.0	5498.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.2	1.3
10°-20°	211.1	3.8
20°-30°	361.1	6.6
30°-40°	580.6	10.6
40°-50°	906.5	16.5
50°-60°	1210.9	22.0
60°-70°	1290.6	23.5
70°-80°	794.5	14.5
80°-90°	69.6	1.3
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°	5498.1	100.0
0°-180°	5498.1	100.0

**Coefficient of Utilization**



REPORT NUMBER: P959770

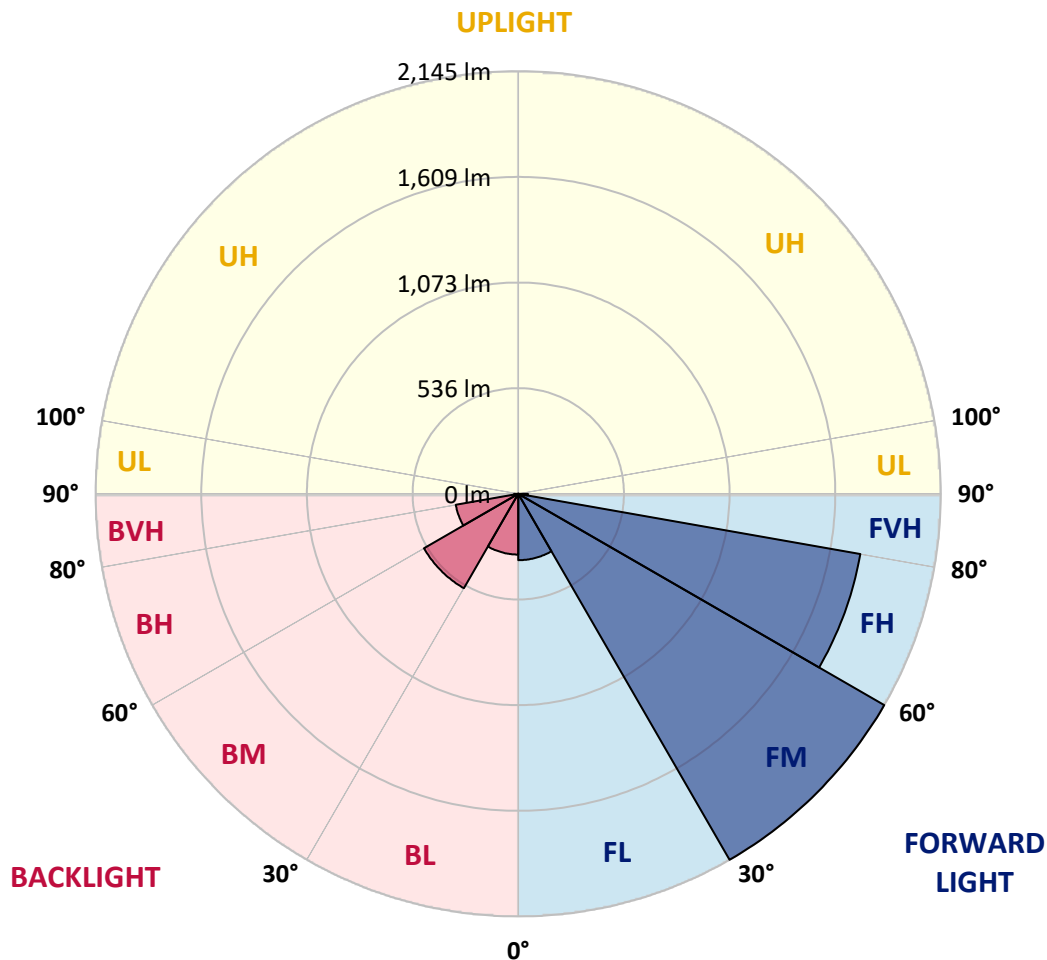
CATALOG NUMBER: NAV-SB1B-727-U-T3R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	336.8	6.1			
FM (30°-60°)	2145.2	39.0			
FH (60°-80°)	1763.3	32.1			G1/1800
FVH (80°-90°)	48.7	0.9			G1/100
BL (0°-30°)	308.5	5.6	B1/500		
BM (30°-60°)	552.8	10.1	B1/1000		
BH (60°-80°)	321.8	5.9	B1/500		G1/500
BVH (80°-90°)	20.9	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type III Medium



REPORT NUMBER: P959770

CATALOG NUMBER: NAV-SB1B-727-U-T3R

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	767.0	767.0	767.0	767.0	767.0	767.0	767.0	767.0	767.0	767.0	767.0
2.5°	707.0	706.7	710.4	711.6	718.3	723.1	732.2	741.7	754.1	755.5	763.1
5°	666.2	666.2	670.5	675.0	683.7	693.3	707.0	723.6	745.1	748.5	767.3
7.5°	631.6	633.9	637.6	646.3	656.4	670.1	691.3	714.9	743.1	748.5	778.9
10°	603.7	606.3	610.8	617.8	633.0	652.1	679.8	710.1	747.8	756.3	795.7
12.5°	595.0	597.5	600.0	605.4	619.5	642.1	675.0	712.4	759.4	767.9	818.9
15°	615.3	618.4	616.4	615.0	622.3	642.9	677.2	720.6	773.8	785.9	847.3
17.5°	662.0	663.2	658.7	645.3	644.3	655.3	687.9	731.8	791.8	805.0	876.0
20°	737.5	735.5	726.2	700.0	685.1	682.9	706.2	748.8	810.4	824.5	907.0
22.5°	840.0	837.7	819.1	777.8	744.5	722.5	732.7	770.7	831.3	847.0	937.2
25°	967.8	964.7	937.4	881.1	829.5	775.2	768.7	799.7	856.9	871.5	968.6
27.5°	1117.0	1114.5	1085.0	1010.6	936.2	847.3	813.5	833.7	883.7	900.3	1004.1
30°	1277.6	1284.8	1232.5	1152.5	1058.5	941.4	873.7	875.8	918.2	933.2	1047.2
32.5°	1466.2	1478.9	1415.8	1314.5	1186.0	1043.6	949.8	934.3	968.6	981.0	1101.6
35°	1653.2	1667.6	1615.2	1503.1	1355.3	1164.1	1029.2	1001.6	1035.7	1049.2	1173.6
37.5°	1814.8	1833.9	1807.0	1709.5	1536.4	1309.3	1132.8	1080.8	1118.2	1135.1	1270.5
40°	1942.4	1971.7	1969.6	1908.9	1749.8	1485.6	1264.3	1178.4	1220.7	1239.0	1388.0
42.5°	2046.0	2071.3	2093.3	2090.2	1972.5	1685.8	1418.9	1305.4	1337.5	1358.6	1520.0
45°	2117.5	2144.5	2191.9	2242.8	2186.7	1900.1	1596.0	1456.1	1485.3	1517.2	1677.4
47.5°	2181.4	2212.2	2273.6	2354.3	2368.7	2115.3	1790.1	1631.5	1658.2	1691.1	1835.4
50°	2187.0	2213.5	2308.7	2423.3	2497.9	2321.9	1998.4	1828.3	1853.4	1888.6	2004.6
52.5°	2051.0	2092.7	2258.9	2421.4	2557.4	2494.8	2205.4	2033.1	2061.2	2103.4	2179.8
55°	1592.0	1653.2	2112.7	2345.9	2536.3	2606.6	2402.2	2250.7	2286.8	2331.0	2356.1
57.5°	1371.3	1398.1	1677.1	2208.5	2439.9	2635.6	2568.3	2470.7	2528.7	2577.1	2542.4
60°	1232.5	1254.7	1419.7	1994.8	2313.2	2589.8	2696.8	2675.7	2775.9	2833.6	2733.1
62.5°	1083.8	1104.9	1255.0	1665.5	2151.1	2513.4	2777.9	2864.9	3029.3	3092.3	2912.7
65°	936.2	954.3	1098.2	1399.4	1944.9	2437.1	2819.8	3028.5	3263.8	3329.2	3062.0
67.5°	771.8	786.8	922.7	1180.7	1694.3	2332.6	2840.6	3157.1	3468.0	3524.1	3135.7
70°	557.0	568.6	709.0	933.8	1379.8	2153.0	2832.2	3248.3	3573.9	3618.7	3079.9
72.5°	263.3	273.7	438.7	606.3	974.6	1803.3	2661.2	3176.0	3466.3	3444.1	2738.7
75°	140.5	149.5	252.0	332.5	514.8	1236.1	2177.8	2735.8	2910.7	2802.7	2024.1
77.5°	95.2	102.2	156.0	199.7	235.1	586.8	1399.7	1894.2	1822.4	1643.9	1013.7
80°	75.4	82.8	127.8	135.2	113.8	212.1	578.4	876.9	629.9	503.8	288.3
82.5°	58.0	66.2	107.5	98.0	61.9	87.0	168.4	277.4	161.3	122.8	69.8
85°	35.5	44.2	84.5	62.5	35.0	39.7	57.2	77.2	49.3	41.1	25.0
87.5°	18.0	25.3	42.8	22.9	15.8	9.3	15.2	15.2	12.9	11.3	6.5
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: P959770  
 CATALOG NUMBER: NAV-SB1B-727-U-T3R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	767.0	767.0	767.0	767.0	767.0	767.0	767.0	767.0	767.0	767.0	767.0
2.5°	769.9	775.5	785.0	794.1	801.1	807.9	814.7	818.3	819.4	823.9	826.5
5°	778.9	789.2	807.9	825.3	836.3	843.1	847.9	850.6	851.3	852.6	854.8
7.5°	795.5	812.1	838.0	855.5	863.7	863.0	861.1	854.0	851.3	848.7	849.2
10°	818.9	840.8	872.6	884.8	879.7	866.1	848.7	828.1	818.6	809.2	806.5
12.5°	847.9	875.8	907.0	906.4	881.4	846.8	806.2	774.6	754.6	740.3	736.9
15°	883.0	915.1	939.1	919.9	865.0	802.8	743.4	702.2	684.3	668.5	666.8
17.5°	919.3	953.8	964.7	915.7	823.9	737.8	670.5	638.1	620.3	611.9	614.4
20°	954.9	988.9	979.9	891.5	761.4	664.0	604.0	586.3	582.6	584.6	583.7
22.5°	992.3	1022.7	983.0	844.7	681.7	588.6	555.6	556.2	564.3	570.2	571.6
25°	1030.6	1051.1	974.9	777.2	596.1	533.0	524.9	533.9	549.9	561.5	564.6
27.5°	1067.4	1076.5	957.1	693.5	522.6	493.3	494.8	513.3	537.5	553.6	557.5
30°	1109.2	1099.0	923.0	599.5	471.6	459.3	471.1	492.8	517.0	531.4	534.7
32.5°	1156.2	1118.5	869.0	512.5	435.6	431.9	451.4	465.5	476.1	480.4	482.7
35°	1214.7	1145.7	799.7	451.4	403.2	411.9	430.5	423.5	419.3	417.1	419.3
37.5°	1290.8	1182.6	718.6	411.6	377.0	397.6	405.2	383.2	366.6	358.4	360.4
40°	1382.3	1236.8	640.6	381.0	360.4	385.2	372.0	345.5	324.4	312.8	313.6
42.5°	1484.0	1293.3	575.0	357.9	351.2	375.0	347.5	315.9	281.9	278.2	281.9
45°	1590.7	1351.6	530.2	340.2	346.7	366.3	333.4	282.4	258.2	273.2	281.1
47.5°	1697.4	1405.1	503.2	326.9	344.4	356.5	321.0	263.8	246.7	268.3	278.5
50°	1816.2	1452.9	491.1	317.3	341.8	352.5	302.4	259.0	234.5	248.9	259.6
52.5°	1934.2	1490.1	482.1	307.8	338.1	349.4	293.5	253.4	220.0	220.8	226.6
55°	2051.9	1514.3	472.2	295.1	330.0	342.7	292.5	247.2	208.9	205.0	207.8
57.5°	2177.5	1528.2	460.1	281.1	315.9	325.5	291.7	242.4	205.5	199.1	199.9
60°	2305.3	1548.5	444.3	263.8	297.0	304.9	289.8	240.8	203.6	192.6	193.4
62.5°	2419.9	1555.4	425.5	247.5	272.9	284.6	285.6	239.3	198.2	179.4	179.4
65°	2495.2	1525.1	392.6	228.9	246.7	263.8	277.4	234.5	188.7	169.8	169.8
67.5°	2492.0	1438.4	341.0	205.0	221.3	240.8	265.6	226.4	177.1	158.0	158.8
70°	2376.1	1267.1	275.6	177.1	193.4	216.0	250.3	214.3	163.3	145.0	146.7
72.5°	2037.8	991.8	200.2	144.4	161.0	190.3	230.6	199.7	149.2	133.5	132.6
75°	1455.8	627.6	135.7	110.9	125.3	161.3	206.1	182.4	136.3	134.1	126.4
77.5°	743.6	299.9	89.8	81.1	87.3	127.3	173.2	163.1	138.3	110.7	98.6
80°	241.9	110.7	56.6	55.1	58.0	84.8	134.1	133.8	104.8	75.1	66.4
82.5°	77.2	47.6	36.9	35.5	34.0	53.2	93.5	105.9	70.7	47.6	47.4
85°	30.6	28.4	21.7	20.0	14.3	25.0	49.0	70.4	52.7	34.3	35.2
87.5°	11.3	11.3	5.9	4.2	3.1	8.4	13.2	21.1	30.1	17.7	17.4
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)