

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: P881708

Luminaire Tested: **NAV-SB1B-727-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881708  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1B-727-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

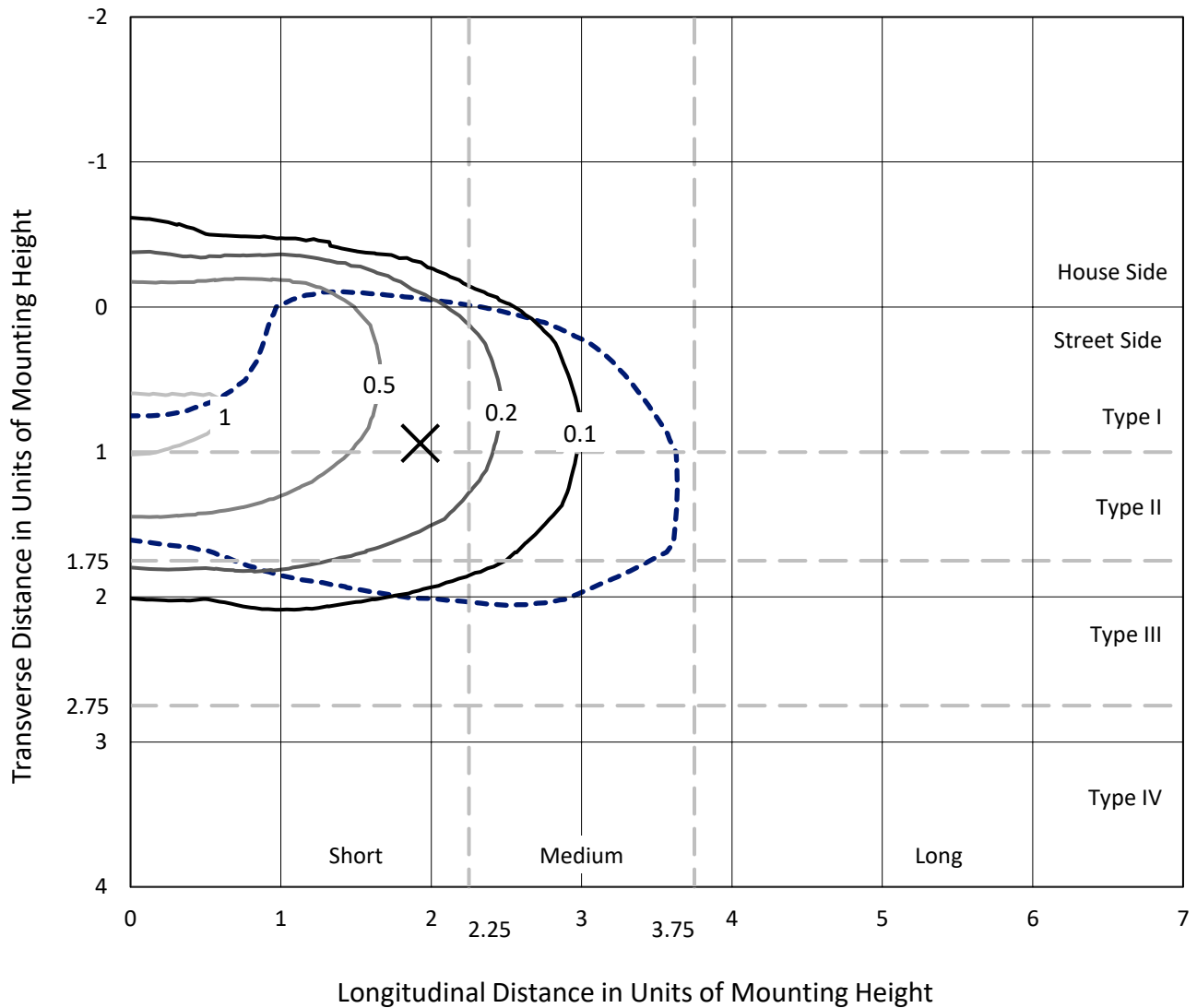
Lumens per Lamp: N/A  
Luminaire Lumens: 4006 lumens  
Efficiency: N/A  
Efficacy: 100.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 39.8  
Input Voltage (V): 120.0  
Input Current (Ain): 0.33  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 5.305  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P881708  
 CATALOG NUMBER: NAV-SB1B-727-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

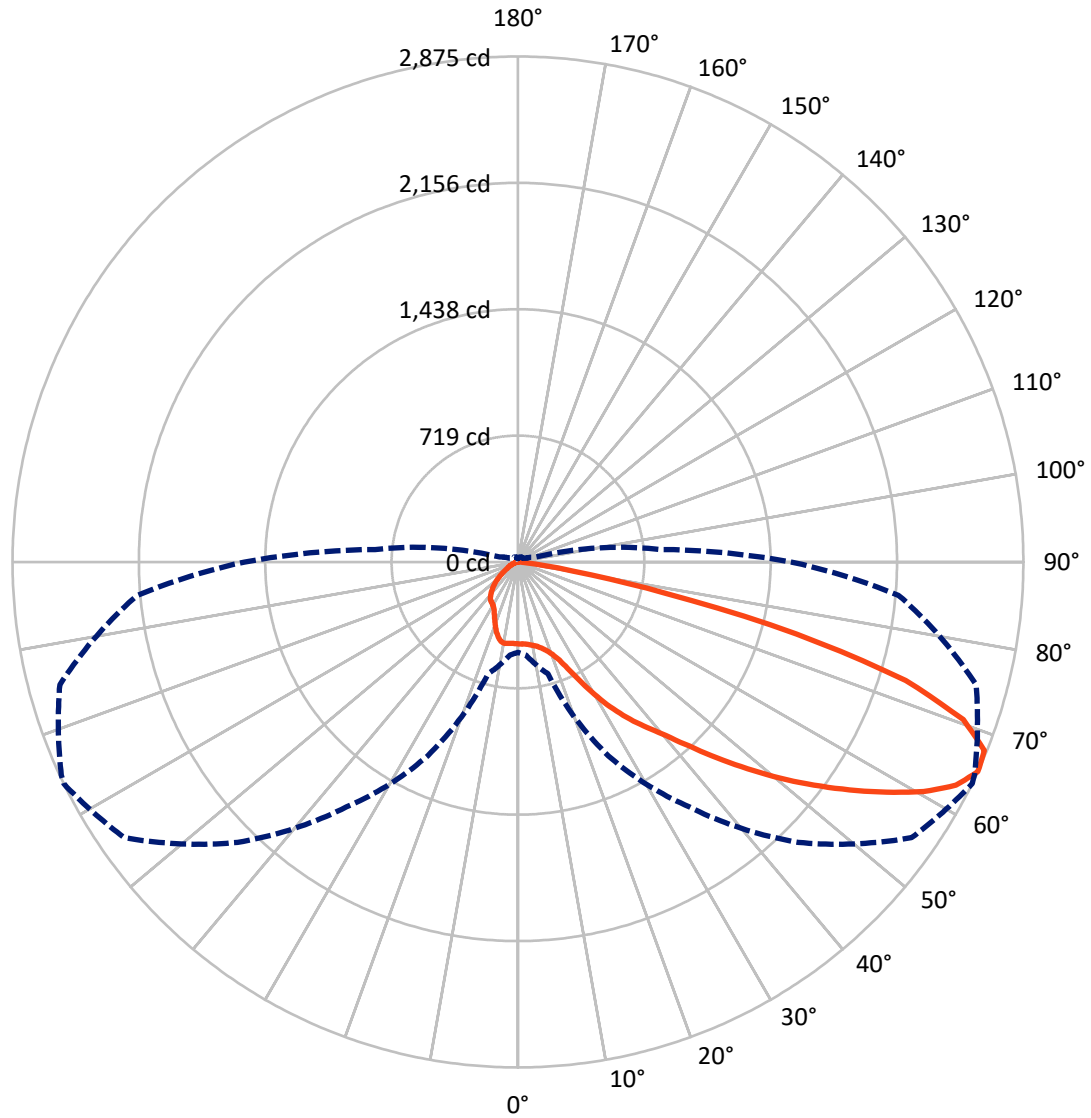
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type III - Short - N/A

REPORT NUMBER: P881708  
CATALOG NUMBER: NAV-SB1B-727-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P881708

CATALOG NUMBER: NAV-SB1B-727-U-T3-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	535.7	0.0	535.7
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	3470.3	0.0	3470.3
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	4006.0	0.0	4006.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.0	1.1
10°-20°	116.6	2.9
20°-30°	220.9	5.5
30°-40°	447.1	11.2
40°-50°	761.6	19.0
50°-60°	1035.7	25.9
60°-70°	972.6	24.3
70°-80°	389.7	9.7
80°-90°	18.9	0.5
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°	4006.0	100.0
0°-180°	4006.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P881708

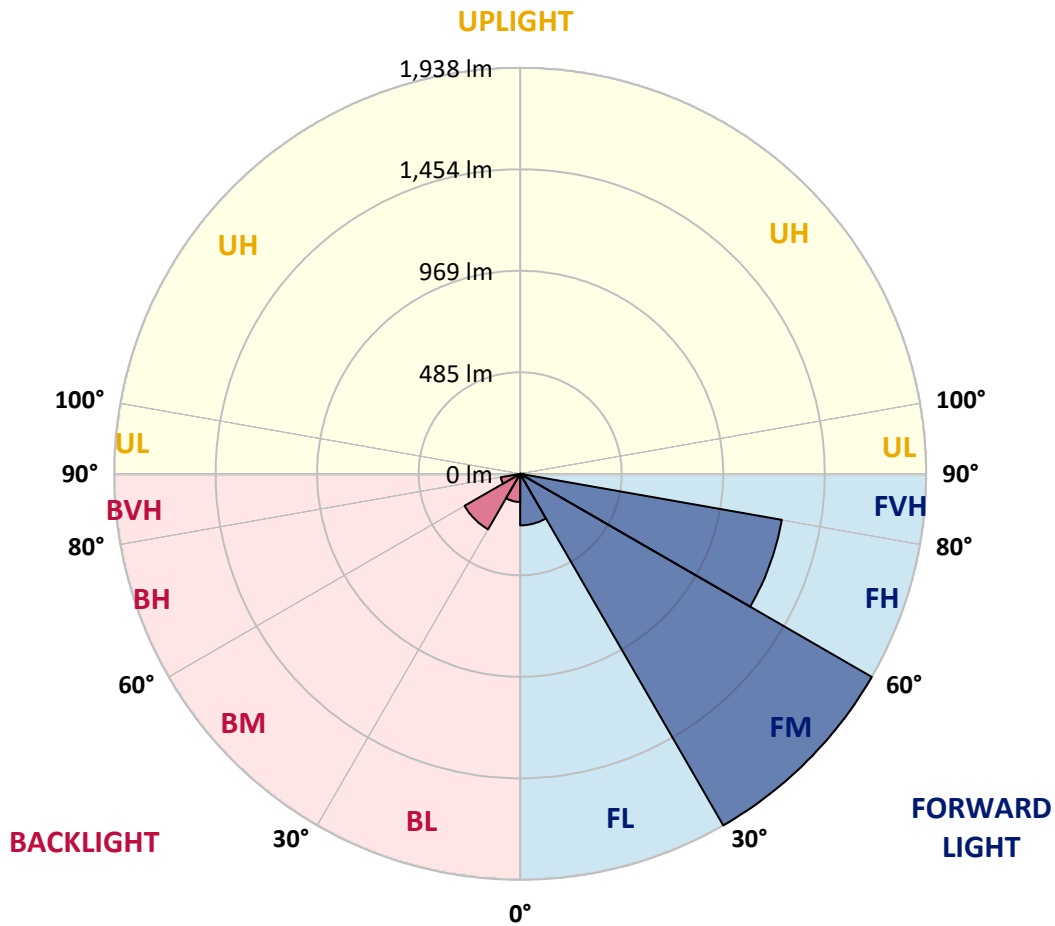
CATALOG NUMBER: NAV-SB1B-727-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	246.0	6.1			
FM (30°-60°)	1938.1	48.4			
FH (60°-80°)	1268.2	31.7			G1/1800
FVH (80°-90°)	18.0	0.4			G1/100
BL (0°-30°)	134.5	3.4	B1/500		
BM (30°-60°)	306.3	7.6	B1/1000		
BH (60°-80°)	94.0	2.3	B0/110		G0/110
BVH (80°-90°)	0.9	0.0			G0/10
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 Short



REPORT NUMBER: P881708

CATALOG NUMBER: NAV-SB1B-727-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	465.9	465.9	465.9	465.9	465.9	465.9	465.9	465.9	465.9	465.9	465.9
2.5°	464.3	467.6	466.7	465.9	465.7	466.2	466.5	466.2	466.2	466.2	466.5
5°	455.5	458.2	458.2	460.0	462.7	465.9	468.4	468.9	469.4	470.2	470.0
7.5°	438.5	440.7	442.3	448.5	455.2	463.8	471.0	474.8	475.3	478.3	479.4
10°	427.0	429.7	432.4	438.8	448.5	461.4	473.7	482.9	484.2	491.2	494.4
12.5°	426.5	429.1	432.6	439.6	450.9	464.6	479.6	492.8	495.2	505.4	512.1
15°	432.1	435.3	438.5	447.1	459.2	475.9	492.0	508.4	510.8	525.3	532.5
17.5°	443.6	447.9	450.4	459.0	471.8	490.4	511.6	530.4	532.5	549.5	558.6
20°	466.5	471.6	472.4	479.4	492.0	511.9	537.1	560.5	563.2	582.5	592.7
22.5°	513.7	521.0	514.5	518.0	529.3	549.2	576.6	606.1	609.9	631.9	641.0
25°	597.0	607.2	590.5	584.6	589.5	610.2	644.5	681.9	686.2	703.9	708.4
27.5°	760.5	747.4	722.1	697.4	682.9	694.7	733.4	779.6	785.0	802.2	796.8
30°	940.2	928.7	894.5	839.8	805.4	803.5	839.2	890.8	897.0	913.3	897.0
32.5°	1120.1	1109.1	1072.1	1004.7	945.0	915.5	940.2	997.4	1000.6	1011.1	986.9
35°	1297.1	1285.8	1248.8	1179.8	1106.4	1039.3	1034.5	1098.9	1100.0	1111.0	1075.0
37.5°	1475.2	1465.8	1426.3	1358.6	1286.4	1193.7	1148.9	1195.1	1196.4	1207.1	1169.8
40°	1602.2	1606.2	1579.1	1526.7	1464.7	1363.4	1277.2	1297.4	1289.3	1307.3	1285.0
42.5°	1711.2	1719.3	1695.6	1669.3	1633.3	1544.2	1436.2	1432.7	1419.8	1429.5	1406.4
45°	1805.5	1812.2	1791.0	1784.8	1784.0	1721.4	1610.0	1589.0	1571.0	1569.2	1541.5
47.5°	1840.1	1853.0	1862.1	1882.8	1923.1	1896.8	1789.6	1757.1	1737.0	1722.2	1678.5
50°	1853.3	1867.0	1898.1	1958.3	2053.6	2064.9	1968.5	1932.0	1907.3	1880.4	1816.0
52.5°	1835.6	1860.0	1901.9	2003.1	2141.4	2199.7	2140.1	2108.1	2079.9	2036.2	1940.6
55°	1731.1	1755.5	1841.2	2002.6	2185.2	2294.2	2302.3	2288.1	2256.4	2187.4	2041.3
57.5°	1510.9	1547.1	1682.8	1934.4	2184.4	2375.6	2461.3	2471.5	2436.0	2337.2	2120.5
60°	1205.8	1254.9	1420.4	1783.2	2117.0	2419.7	2600.7	2651.7	2614.1	2484.9	2184.7
62.5°	841.4	898.3	1054.9	1546.3	1962.9	2388.0	2702.4	2796.7	2768.2	2617.0	2209.4
65°	513.2	531.5	657.7	1216.8	1700.7	2255.3	2733.9	2875.1	2865.7	2697.9	2172.9
67.5°	341.9	357.2	393.4	834.4	1320.2	1990.2	2658.7	2861.4	2864.1	2684.7	2039.1
70°	206.0	219.1	242.8	485.3	855.6	1575.3	2425.8	2686.9	2702.4	2508.8	1785.6
72.5°	84.9	93.7	115.2	219.9	443.1	999.8	1931.7	2306.9	2343.1	2109.5	1370.4
75°	48.1	52.6	67.7	110.4	192.3	465.9	1170.1	1637.6	1691.1	1453.9	824.5
77.5°	32.0	34.1	43.8	71.4	108.2	159.0	500.0	853.2	955.2	794.1	356.9
80°	21.5	23.4	30.1	47.8	70.4	68.2	159.3	316.1	388.9	272.8	87.0
82.5°	14.5	14.8	21.5	31.4	44.6	33.0	47.0	98.3	123.5	79.0	33.0
85°	8.3	8.1	15.8	18.3	19.9	13.7	14.2	29.5	38.7	33.3	18.8
87.5°	1.1	1.6	6.2	4.8	2.7	3.0	3.0	5.1	7.5	8.1	4.0
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: P881708

CATALOG NUMBER: NAV-SB1B-727-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	465.9	465.9	465.9	465.9	465.9	465.9	465.9	465.9	465.9	465.9	465.9
2.5°	466.5	466.2	465.4	464.6	462.7	461.6	462.2	461.6	461.4	461.6	462.7
5°	470.0	469.2	467.0	464.3	460.6	456.0	453.0	448.8	444.7	442.3	442.8
7.5°	479.4	478.6	475.6	468.1	456.0	436.9	419.5	404.2	392.6	385.9	386.2
10°	494.4	493.1	488.5	471.8	440.2	398.5	363.9	335.2	316.4	307.5	306.7
12.5°	512.1	510.5	502.5	468.4	410.1	345.1	297.3	265.3	247.9	240.1	239.3
15°	533.1	530.9	515.1	451.7	366.3	286.0	242.2	218.3	207.1	200.1	200.3
17.5°	559.1	555.4	524.5	426.7	318.8	240.9	208.4	190.4	180.5	173.8	173.2
20°	593.0	586.8	532.0	396.9	275.0	212.4	185.6	170.5	163.0	157.1	156.0
22.5°	640.2	631.4	541.1	364.7	244.1	192.8	168.7	157.6	151.5	144.8	143.7
25°	698.8	688.3	552.4	334.9	222.9	175.9	156.3	147.2	139.9	132.1	131.3
27.5°	780.7	761.9	565.8	310.4	204.6	161.4	145.0	134.8	126.5	120.0	118.7
30°	872.0	841.1	577.7	295.7	188.0	148.0	130.2	120.0	112.3	107.7	106.9
32.5°	958.5	916.6	585.4	289.2	172.9	132.7	114.1	103.1	97.2	95.9	96.7
35°	1040.1	984.8	584.6	283.1	159.5	117.4	98.3	87.0	82.4	83.3	83.3
37.5°	1134.1	1057.6	579.0	273.4	148.5	103.4	84.6	74.7	70.6	70.9	72.0
40°	1243.4	1141.6	575.5	255.1	136.4	90.5	73.3	65.3	62.3	61.2	61.0
42.5°	1360.0	1223.0	576.0	234.4	121.4	79.0	65.5	58.8	56.1	55.3	55.1
45°	1477.0	1300.6	576.9	213.0	105.5	70.1	59.9	54.2	52.6	51.6	51.6
47.5°	1587.1	1366.7	561.8	189.9	90.0	63.4	55.3	51.6	50.2	48.9	48.9
50°	1689.7	1410.7	525.6	163.0	77.6	58.0	51.8	49.1	47.8	46.5	46.5
52.5°	1769.5	1417.7	465.7	135.4	69.0	54.0	49.7	47.3	45.7	44.3	44.0
55°	1804.9	1373.9	380.5	109.6	62.3	50.5	47.5	45.1	43.2	41.9	41.6
57.5°	1795.8	1281.8	296.8	88.1	55.9	47.0	44.8	43.2	41.1	38.9	38.7
60°	1751.0	1158.5	223.7	73.3	50.0	43.2	41.9	40.6	37.6	34.4	33.8
62.5°	1673.4	1003.6	159.5	60.7	43.5	38.9	38.4	37.3	33.0	27.1	26.6
65°	1554.7	815.3	107.4	50.5	37.3	34.1	34.4	32.5	26.9	20.1	19.6
67.5°	1381.2	596.2	68.7	41.4	31.2	28.5	28.7	27.7	22.8	17.2	16.4
70°	1160.1	394.8	44.8	31.4	25.0	22.0	23.6	23.9	19.3	14.0	13.4
72.5°	850.5	233.1	31.4	23.4	18.3	15.3	19.3	19.9	15.6	10.5	9.9
75°	484.7	110.6	23.6	16.9	11.3	10.7	15.0	15.0	10.7	7.0	6.4
77.5°	203.6	46.2	16.7	11.0	6.4	6.2	10.2	9.4	5.4	3.2	3.2
80°	58.8	20.7	8.9	5.4	2.7	2.4	4.0	3.0	1.3	0.5	0.5
82.5°	23.1	9.1	3.5	2.1	1.1	1.1	0.5	0.0	0.0	0.0	0.0
85°	13.7	3.8	1.6	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.5	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)