

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: P881578

Luminaire Tested: **NAV-SB1A-750-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881578  
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-SB1A-750-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 5000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

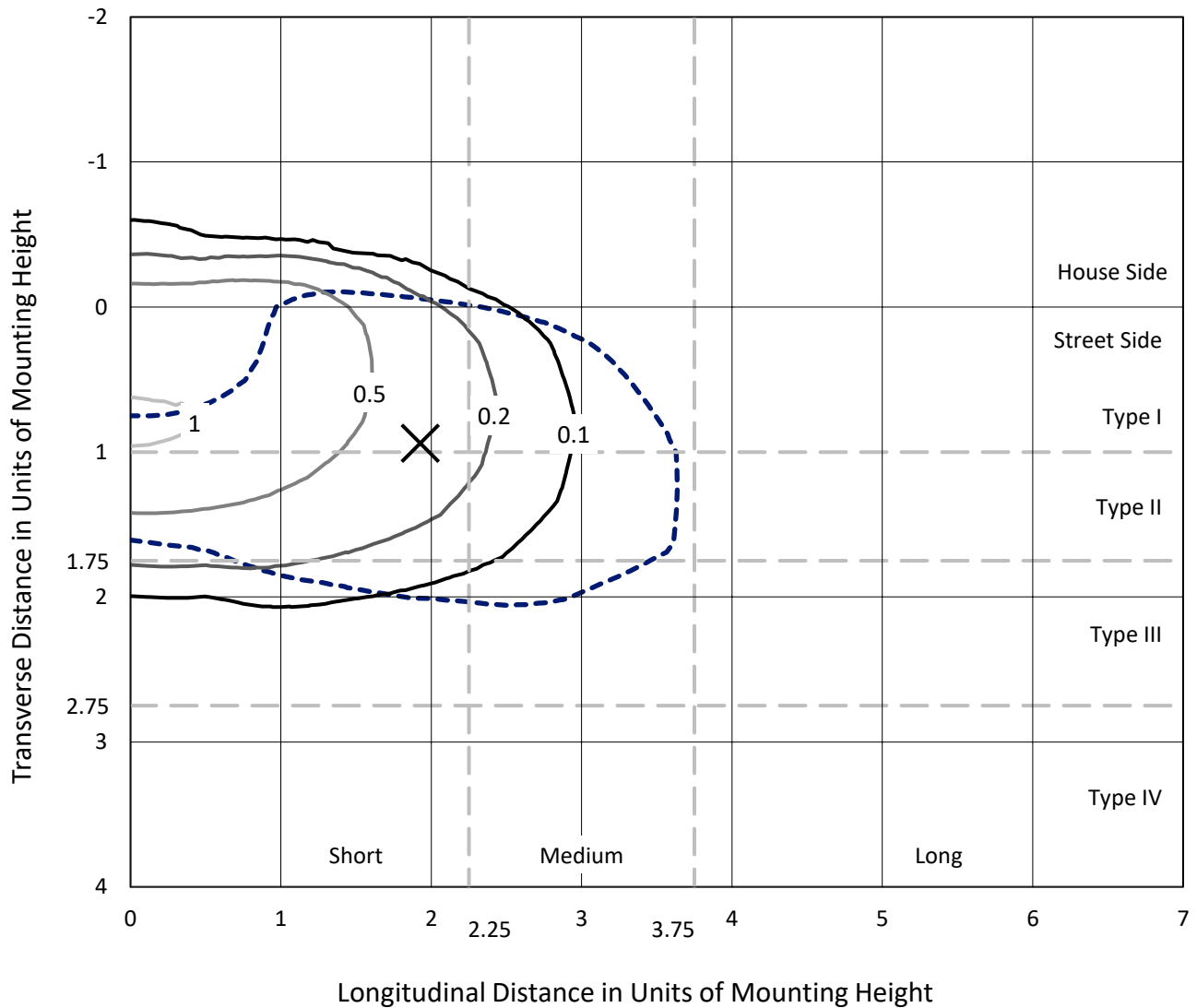
Lumens per Lamp: N/A  
Luminaire Lumens: 3796 lumens  
Efficiency: N/A  
Efficacy: 122.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.263  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 6.356  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P881578  
 CATALOG NUMBER: NAV-SB1A-750-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

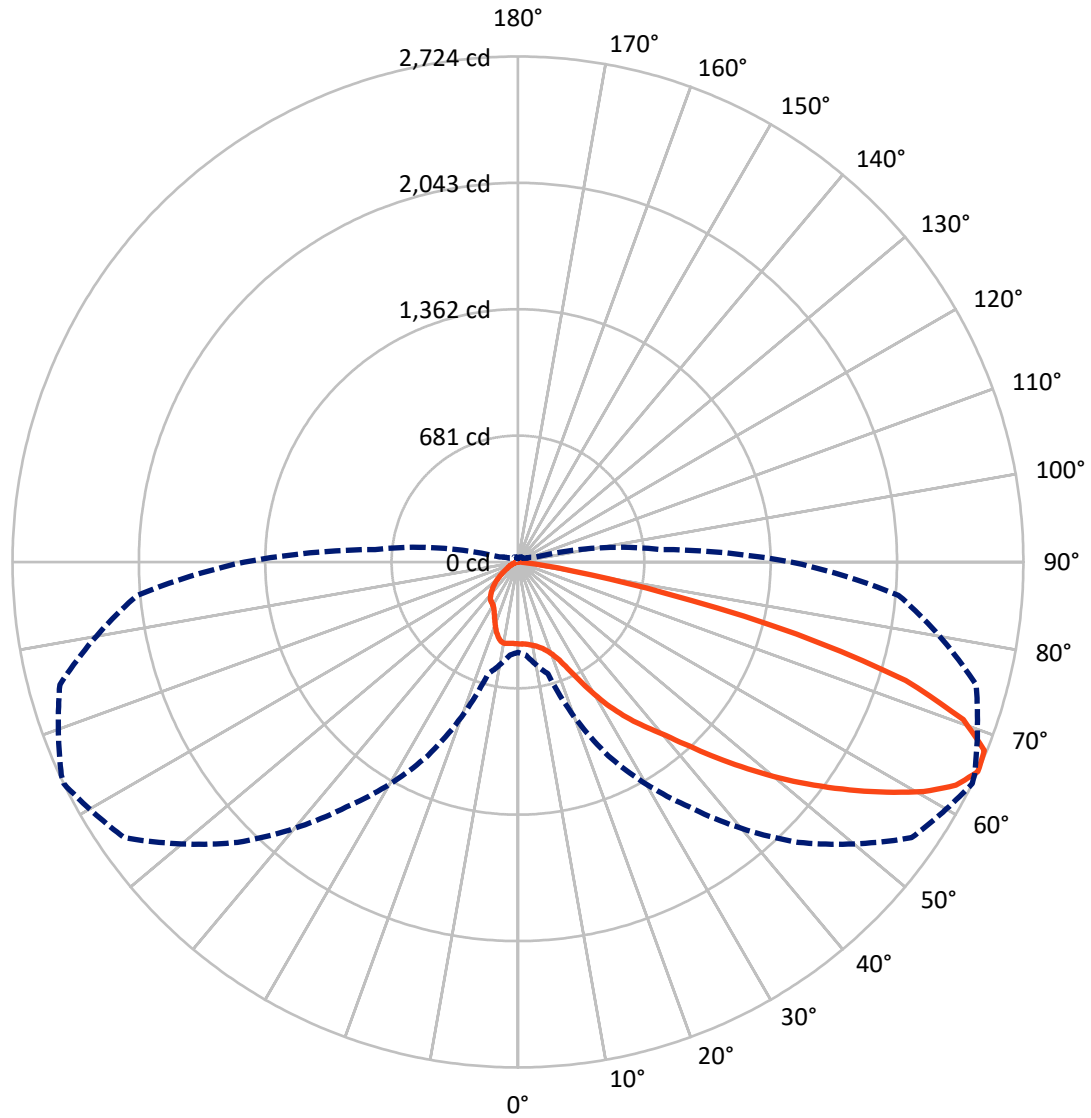
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc  
 Type III - Short - N/A

REPORT NUMBER: P881578  
CATALOG NUMBER: NAV-SB1A-750-U-T3-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P881578

CATALOG NUMBER: NAV-SB1A-750-U-T3-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	507.6	0.0	507.6
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	3288.4	0.0	3288.4
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	3796.0	0.0	3796.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.7	1.1
10°-20°	110.5	2.9
20°-30°	209.4	5.5
30°-40°	423.6	11.2
40°-50°	721.7	19.0
50°-60°	981.4	25.9
60°-70°	921.6	24.3
70°-80°	369.2	9.7
80°-90°	17.9	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°	3796.0	100.0
0°-180°	3796.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P881578

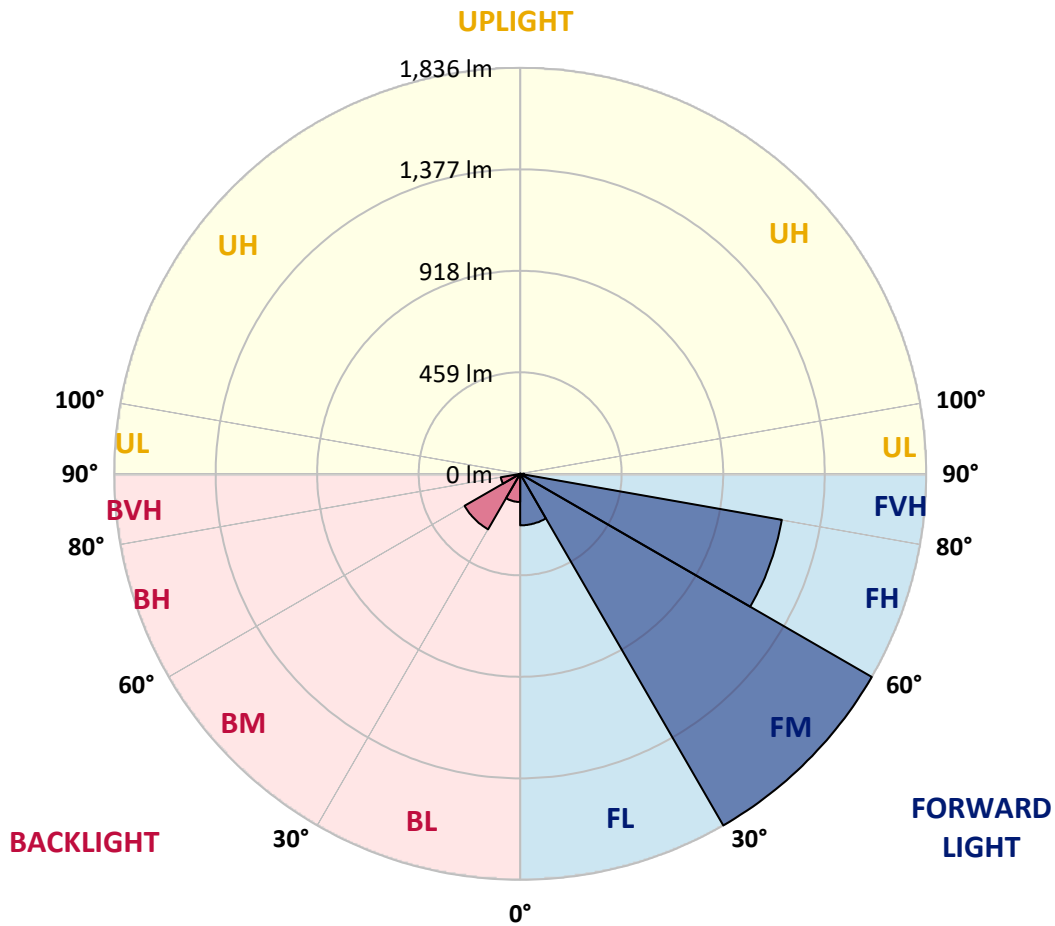
CATALOG NUMBER: NAV-SB1A-750-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	233.1	6.1			
FM (30°-60°)	1836.5	48.4			
FH (60°-80°)	1201.7	31.7			G1/1800
FVH (80°-90°)	17.0	0.4			G1/100
BL (0°-30°)	127.5	3.4	B1/500		
BM (30°-60°)	290.2	7.6	B1/1000		
BH (60°-80°)	89.1	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: P881578

CATALOG NUMBER: NAV-SB1A-750-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5
2.5°	440.0	443.0	442.3	441.5	441.3	441.8	442.0	441.8	441.8	441.8	442.0
5°	431.6	434.1	434.1	435.9	438.5	441.5	443.8	444.3	444.8	445.6	445.3
7.5°	415.6	417.6	419.1	425.0	431.3	439.5	446.3	449.9	450.4	453.2	454.2
10°	404.6	407.2	409.7	415.8	425.0	437.2	448.9	457.5	458.8	465.4	468.5
12.5°	404.1	406.7	410.0	416.6	427.3	440.2	454.5	467.0	469.3	478.9	485.3
15°	409.5	412.5	415.6	423.7	435.2	450.9	466.2	481.7	484.0	497.8	504.6
17.5°	420.4	424.5	426.8	434.9	447.1	464.7	484.8	502.6	504.6	520.7	529.3
20°	442.0	446.9	447.6	454.2	466.2	485.0	509.0	531.1	533.6	552.0	561.6
22.5°	486.8	493.7	487.6	490.9	501.6	520.4	546.4	574.4	577.9	598.8	607.4
25°	565.7	575.4	559.6	554.0	558.6	578.2	610.7	646.1	650.2	667.0	671.3
27.5°	720.7	708.2	684.3	660.9	647.1	658.3	695.0	738.7	743.8	760.1	755.0
30°	890.9	880.0	847.7	795.7	763.2	761.4	795.2	844.1	849.9	865.5	849.9
32.5°	1061.4	1051.0	1015.9	952.0	895.5	867.5	890.9	945.1	948.2	958.1	935.2
35°	1229.1	1218.4	1183.3	1117.9	1048.4	984.8	980.2	1041.3	1042.3	1052.8	1018.7
37.5°	1397.8	1388.9	1351.5	1287.4	1218.9	1131.1	1088.6	1132.4	1133.7	1143.9	1108.5
40°	1518.2	1522.0	1496.3	1446.7	1387.9	1292.0	1210.3	1229.4	1221.7	1238.8	1217.7
42.5°	1621.5	1629.1	1606.8	1581.8	1547.7	1463.2	1360.9	1357.6	1345.4	1354.6	1332.7
45°	1710.8	1717.2	1697.1	1691.2	1690.5	1631.2	1525.6	1505.7	1488.7	1486.9	1460.7
47.5°	1743.7	1755.9	1764.5	1784.1	1822.3	1797.4	1695.8	1665.0	1645.9	1631.9	1590.5
50°	1756.1	1769.1	1798.6	1855.6	1946.0	1956.7	1865.3	1830.7	1807.3	1781.8	1720.8
52.5°	1739.3	1762.5	1802.2	1898.1	2029.2	2084.4	2027.9	1997.6	1970.9	1929.4	1838.8
55°	1640.3	1663.5	1744.7	1897.6	2070.7	2174.0	2181.6	2168.1	2138.1	2072.7	1934.3
57.5°	1431.7	1466.0	1594.5	1833.0	2069.9	2251.1	2332.3	2341.9	2308.3	2214.7	2009.3
60°	1142.6	1189.2	1345.9	1689.7	2006.0	2292.8	2464.3	2512.7	2477.1	2354.7	2070.2
62.5°	797.3	851.2	999.6	1465.3	1860.0	2262.8	2560.8	2650.1	2623.1	2479.9	2093.6
65°	486.3	503.6	623.2	1153.0	1611.6	2137.1	2590.6	2724.4	2715.5	2556.5	2059.0
67.5°	323.9	338.5	372.8	790.7	1251.0	1885.9	2519.3	2711.4	2714.0	2544.0	1932.2
70°	195.2	207.7	230.0	459.8	810.8	1492.8	2298.7	2546.0	2560.8	2377.3	1692.0
72.5°	80.4	88.8	109.2	208.4	419.9	947.4	1830.4	2185.9	2220.3	1998.9	1298.6
75°	45.6	49.9	64.1	104.6	182.2	441.5	1108.7	1551.8	1602.4	1377.7	781.2
77.5°	30.3	32.3	41.5	67.7	102.6	150.6	473.8	808.5	905.2	752.5	338.2
80°	20.4	22.1	28.5	45.3	66.7	64.6	150.9	299.5	368.5	258.5	82.4
82.5°	13.7	14.0	20.4	29.8	42.2	31.3	44.5	93.1	117.1	74.8	31.3
85°	7.9	7.6	15.0	17.3	18.8	13.0	13.5	28.0	36.6	31.6	17.8
87.5°	1.0	1.5	5.9	4.6	2.5	2.8	2.8	4.8	7.1	7.6	3.8
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: P881578

CATALOG NUMBER: NAV-SB1A-750-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5
2.5°	442.0	441.8	441.0	440.2	438.5	437.4	438.0	437.4	437.2	437.4	438.5
5°	445.3	444.6	442.5	440.0	436.4	432.1	429.3	425.2	421.4	419.1	419.6
7.5°	454.2	453.5	450.7	443.6	432.1	414.0	397.5	383.0	372.0	365.7	365.9
10°	468.5	467.2	462.9	447.1	417.1	377.6	344.8	317.6	299.8	291.4	290.6
12.5°	485.3	483.8	476.1	443.8	388.6	327.0	281.7	251.4	234.9	227.5	226.7
15°	505.1	503.1	488.1	428.0	347.1	271.0	229.5	206.9	196.2	189.6	189.8
17.5°	529.8	526.3	497.0	404.4	302.1	228.3	197.5	180.4	171.0	164.6	164.1
20°	561.9	556.0	504.1	376.1	260.6	201.3	175.8	161.6	154.5	148.9	147.9
22.5°	606.7	598.3	512.8	345.6	231.3	182.7	159.8	149.4	143.5	137.2	136.1
25°	662.1	652.2	523.5	317.3	211.2	166.7	148.1	139.5	132.6	125.2	124.4
27.5°	739.8	721.9	536.2	294.2	193.9	152.9	137.4	127.7	119.9	113.8	112.5
30°	826.3	797.0	547.4	280.2	178.1	140.2	123.4	113.8	106.4	102.0	101.3
32.5°	908.2	868.5	554.8	274.1	163.9	125.7	108.2	97.7	92.1	90.8	91.6
35°	985.6	933.2	554.0	268.2	151.2	111.2	93.1	82.4	78.1	78.9	78.9
37.5°	1074.6	1002.1	548.6	259.1	140.7	98.0	80.2	70.7	66.9	67.2	68.2
40°	1178.2	1081.8	545.3	241.8	129.3	85.8	69.5	61.8	59.0	58.0	57.8
42.5°	1288.7	1158.9	545.8	222.2	115.0	74.8	62.1	55.7	53.2	52.4	52.2
45°	1399.6	1232.4	546.6	201.8	100.0	66.4	56.7	51.4	49.9	48.9	48.9
47.5°	1503.9	1295.0	532.4	179.9	85.2	60.1	52.4	48.9	47.6	46.3	46.3
50°	1601.2	1336.8	498.0	154.5	73.5	55.0	49.1	46.6	45.3	44.0	44.0
52.5°	1676.7	1343.4	441.3	128.3	65.4	51.1	47.1	44.8	43.3	42.0	41.7
55°	1710.3	1301.9	360.6	103.8	59.0	47.8	45.0	42.8	41.0	39.7	39.4
57.5°	1701.7	1214.6	281.2	83.5	52.9	44.5	42.5	41.0	38.9	36.9	36.6
60°	1659.2	1097.8	212.0	69.5	47.3	41.0	39.7	38.4	35.6	32.6	32.1
62.5°	1585.6	951.0	151.2	57.5	41.2	36.9	36.4	35.4	31.3	25.7	25.2
65°	1473.2	772.6	101.8	47.8	35.4	32.3	32.6	30.8	25.4	19.1	18.6
67.5°	1308.8	564.9	65.1	39.2	29.5	27.0	27.2	26.2	21.6	16.3	15.5
70°	1099.3	374.1	42.5	29.8	23.7	20.9	22.4	22.6	18.3	13.2	12.7
72.5°	805.9	220.9	29.8	22.1	17.3	14.5	18.3	18.8	14.8	9.9	9.4
75°	459.3	104.8	22.4	16.0	10.7	10.2	14.3	14.3	10.2	6.6	6.1
77.5°	192.9	43.8	15.8	10.4	6.1	5.9	9.7	8.9	5.1	3.1	3.1
80°	55.7	19.6	8.4	5.1	2.5	2.3	3.8	2.8	1.3	0.5	0.5
82.5°	21.9	8.7	3.3	2.0	1.0	1.0	0.5	0.0	0.0	0.0	0.0
85°	13.0	3.6	1.5	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.3	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)