

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: P881948

Luminaire Tested: **NAV-SB1C-830-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881948  
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-SB1C-830-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

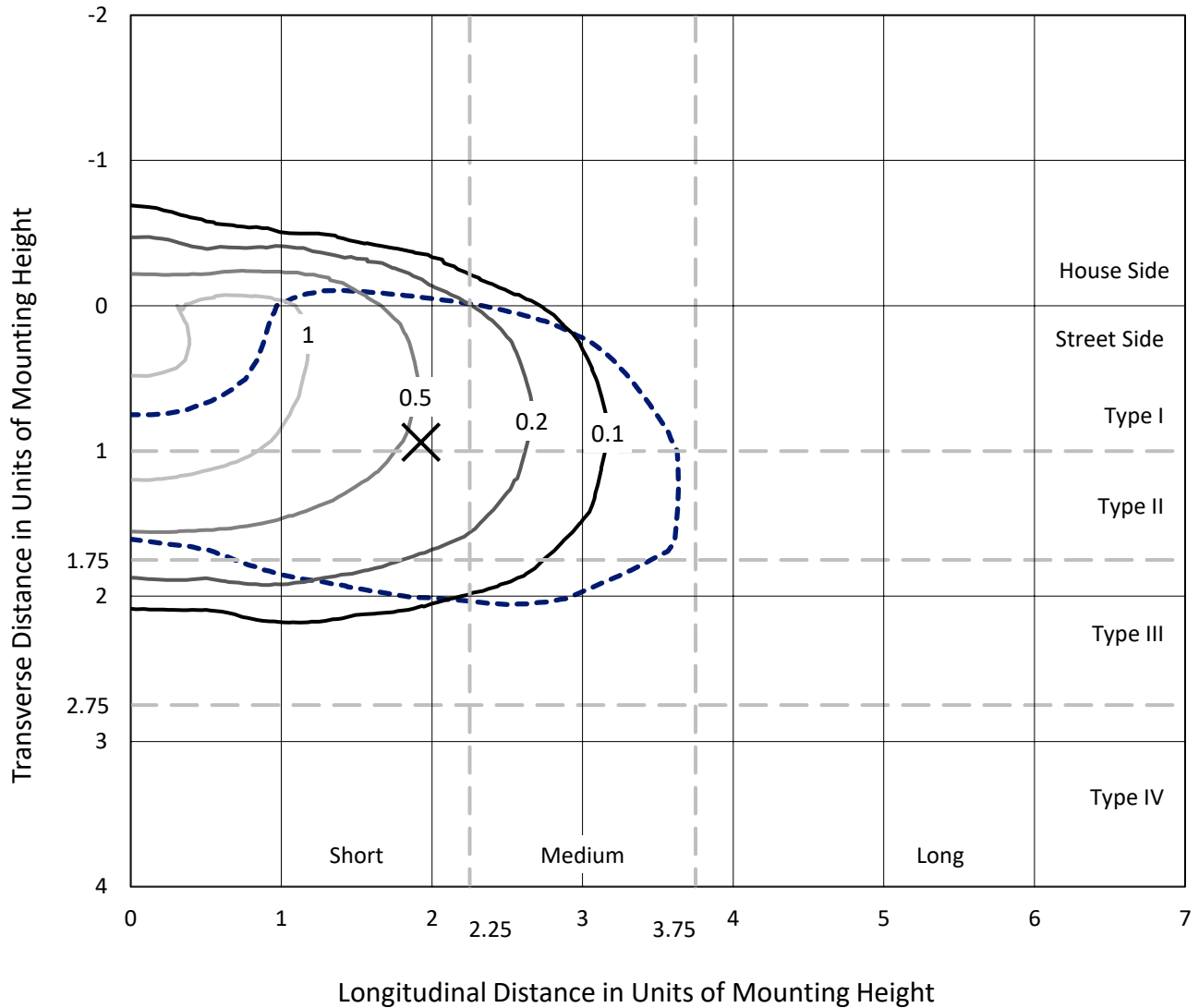
Lumens per Lamp: N/A  
Luminaire Lumens: 5144 lumens  
Efficiency: N/A  
Efficacy: 94.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 54.4  
Input Voltage (V): 120.0  
Input Current (Ain): 0.437  
Voltage Rise (V): NR  
Power Factor: 0.993  
Total Harmonic Distortion (THDi): 9.314  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

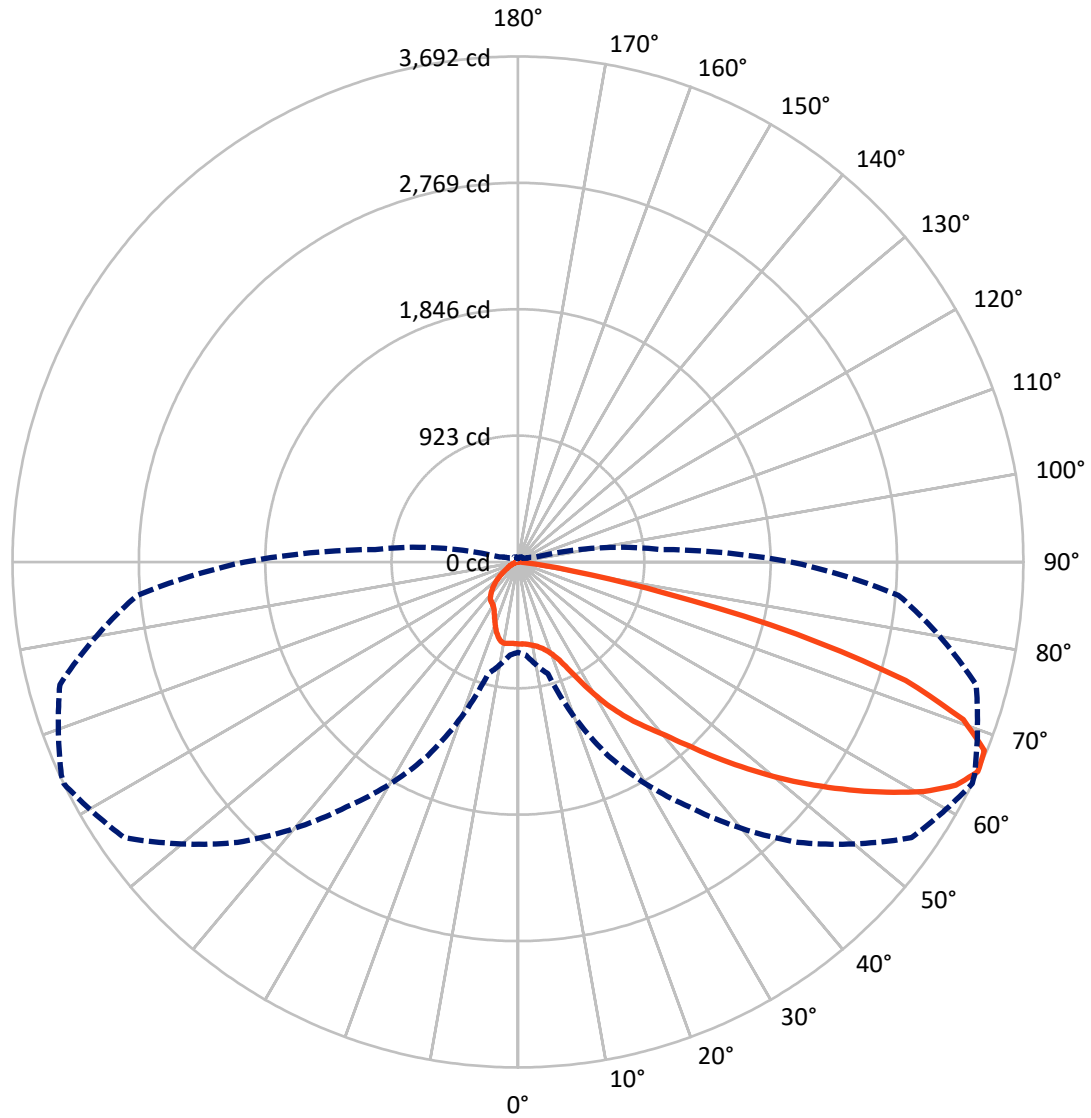
✕ Max cd  
 - - - 1/2 Max cd



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

REPORT NUMBER: P881948  
CATALOG NUMBER: NAV-SB1C-830-U-T3-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P881948

CATALOG NUMBER: NAV-SB1C-830-U-T3-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	687.9	0.0	687.9
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	4456.1	0.0	4456.1
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	5144.0	0.0	5144.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.2	1.1
10°-20°	149.7	2.9
20°-30°	283.7	5.5
30°-40°	574.1	11.2
40°-50°	977.9	19.0
50°-60°	1329.9	25.9
60°-70°	1248.9	24.3
70°-80°	500.3	9.7
80°-90°	24.2	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°	5144.0	100.0
0°-180°	5144.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P881948

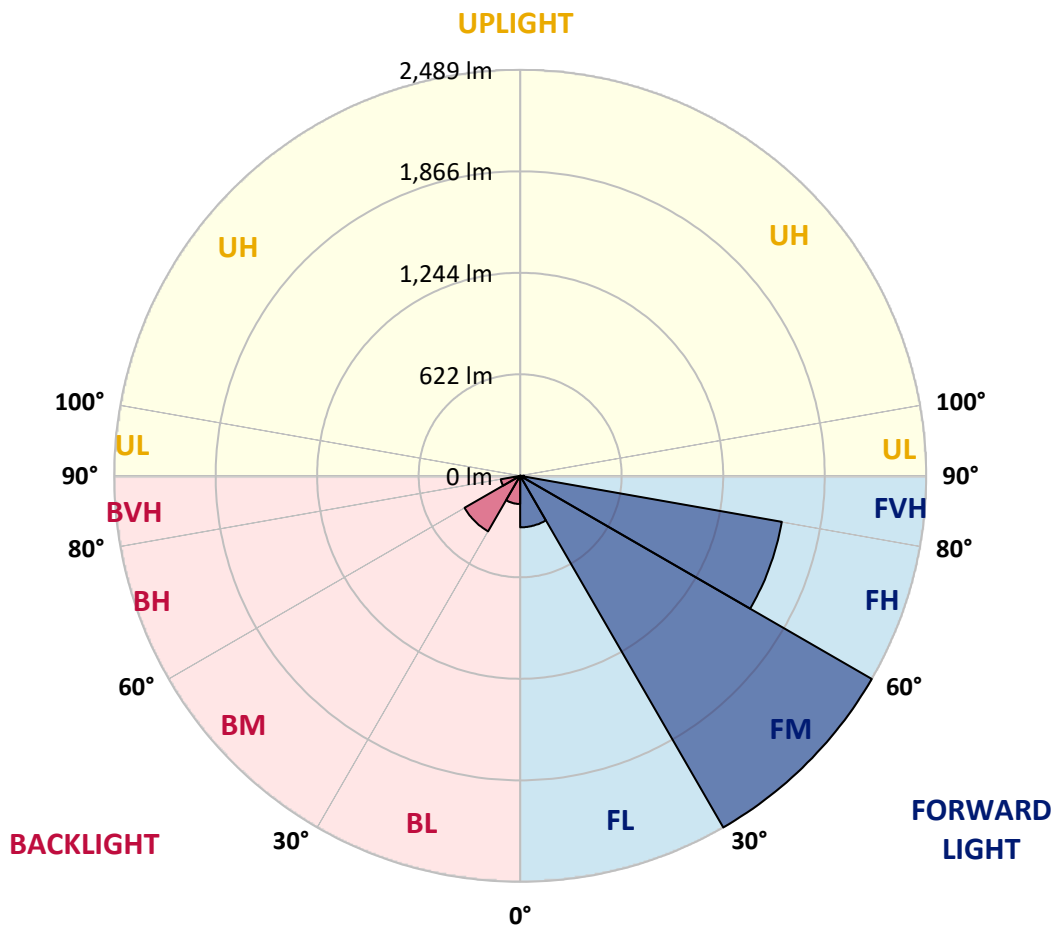
CATALOG NUMBER: NAV-SB1C-830-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	315.9	6.1			
FM (30°-60°)	2488.7	48.4			
FH (60°-80°)	1628.5	31.7			G1/1800
FVH (80°-90°)	23.1	0.4			G1/100
BL (0°-30°)	172.7	3.4	B1/500		
BM (30°-60°)	393.3	7.6	B1/1000		
BH (60°-80°)	120.7	2.3	B1/500		G1/500
BVH (80°-90°)	1.2	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: P881948

CATALOG NUMBER: NAV-SB1C-830-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	598.3	598.3	598.3	598.3	598.3	598.3	598.3	598.3	598.3	598.3	598.3
2.5°	596.2	600.4	599.3	598.3	598.0	598.6	599.0	598.6	598.6	598.6	599.0
5°	584.9	588.3	588.3	590.7	594.2	598.3	601.4	602.1	602.8	603.8	603.5
7.5°	563.1	565.9	568.0	575.9	584.5	595.5	604.9	609.7	610.4	614.2	615.5
10°	548.3	551.7	555.2	563.5	575.9	592.4	608.3	620.0	621.7	630.7	634.9
12.5°	547.6	551.1	555.5	564.5	579.0	596.6	615.9	632.8	635.9	649.0	657.6
15°	554.9	559.0	563.1	574.2	589.7	611.1	631.8	652.8	655.9	674.5	683.8
17.5°	569.7	575.2	578.3	589.3	605.9	629.7	656.9	681.1	683.8	705.5	717.3
20°	599.0	605.5	606.6	615.5	631.8	657.3	689.7	719.7	723.1	748.0	761.1
22.5°	659.7	669.0	660.7	665.2	679.7	705.2	740.4	778.3	783.1	811.4	823.1
25°	766.6	779.7	758.3	750.7	756.9	783.5	827.6	875.6	881.1	903.8	909.7
27.5°	976.6	959.7	927.3	895.6	876.9	892.1	941.8	1001.1	1008.0	1030.0	1023.1
30°	1207.3	1192.5	1148.7	1078.3	1034.2	1031.8	1077.6	1143.8	1151.8	1172.8	1151.8
32.5°	1438.3	1424.2	1376.6	1290.1	1213.5	1175.6	1207.3	1280.7	1284.9	1298.3	1267.3
35°	1665.6	1651.1	1603.5	1514.9	1420.7	1334.5	1328.3	1411.1	1412.5	1426.6	1380.4
37.5°	1894.2	1882.1	1831.5	1744.6	1651.8	1532.8	1475.2	1534.5	1536.3	1550.1	1502.1
40°	2057.3	2062.5	2027.7	1960.4	1880.8	1750.8	1640.1	1665.9	1655.6	1678.7	1650.1
42.5°	2197.3	2207.7	2177.3	2143.5	2097.3	1982.8	1844.2	1839.7	1823.2	1835.6	1805.9
45°	2318.4	2327.0	2299.8	2291.8	2290.8	2210.4	2067.3	2040.4	2017.3	2014.9	1979.4
47.5°	2362.9	2379.4	2391.1	2417.7	2469.4	2435.6	2298.0	2256.3	2230.4	2211.5	2155.3
50°	2379.8	2397.3	2437.3	2514.6	2637.0	2651.5	2527.7	2480.8	2449.1	2414.6	2331.8
52.5°	2357.0	2388.4	2442.2	2572.2	2749.8	2824.6	2748.0	2707.0	2670.8	2614.6	2491.8
55°	2222.9	2254.2	2364.2	2571.5	2806.0	2946.0	2956.3	2938.1	2897.4	2808.7	2621.1
57.5°	1940.1	1986.6	2160.8	2483.9	2804.9	3050.5	3160.5	3173.6	3128.1	3001.2	2722.9
60°	1548.3	1611.4	1823.9	2289.7	2718.4	3107.0	3339.4	3405.0	3356.7	3190.8	2805.3
62.5°	1080.4	1153.5	1354.5	1985.6	2520.4	3066.3	3470.1	3591.2	3554.6	3360.5	2837.0
65°	659.0	682.4	844.5	1562.5	2183.9	2896.0	3510.5	3691.9	3679.8	3464.3	2790.1
67.5°	439.0	458.6	505.2	1071.4	1695.2	2555.6	3413.9	3674.3	3677.7	3447.4	2618.4
70°	264.5	281.4	311.7	623.1	1098.7	2022.8	3115.0	3450.1	3470.1	3221.5	2292.9
72.5°	109.0	120.3	147.9	282.4	569.0	1283.8	2480.4	2962.2	3008.7	2708.7	1759.7
75°	61.7	67.6	86.9	141.7	246.9	598.3	1502.5	2102.8	2171.5	1867.0	1058.7
77.5°	41.0	43.8	56.2	91.7	139.0	204.1	642.1	1095.6	1226.6	1019.7	458.3
80°	27.6	30.0	38.6	61.4	90.3	87.6	204.5	405.9	499.3	350.4	111.7
82.5°	18.6	19.0	27.6	40.3	57.2	42.4	60.3	126.2	158.6	101.4	42.4
85°	10.7	10.3	20.3	23.4	25.5	17.6	18.3	37.9	49.7	42.8	24.1
87.5°	1.4	2.1	7.9	6.2	3.4	3.8	3.8	6.6	9.7	10.3	5.2
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: P881948

CATALOG NUMBER: NAV-SB1C-830-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	598.3	598.3	598.3	598.3	598.3	598.3	598.3	598.3	598.3	598.3	598.3
2.5°	599.0	598.6	597.6	596.6	594.2	592.8	593.5	592.8	592.4	592.8	594.2
5°	603.5	602.4	599.7	596.2	591.4	585.5	581.7	576.2	571.1	568.0	568.6
7.5°	615.5	614.5	610.7	601.1	585.5	561.1	538.6	519.0	504.2	495.5	495.9
10°	634.9	633.1	627.3	605.9	565.2	511.7	467.3	430.4	406.2	394.8	393.8
12.5°	657.6	655.5	645.2	601.4	526.6	443.1	381.7	340.7	318.3	308.3	307.3
15°	684.5	681.8	661.4	580.0	470.4	367.3	311.0	280.4	265.9	256.9	257.3
17.5°	718.0	713.1	673.5	548.0	409.3	309.3	267.6	244.5	231.7	223.1	222.4
20°	761.4	753.5	683.1	509.7	353.1	272.8	238.3	219.0	209.3	201.7	200.4
22.5°	822.1	810.7	694.9	468.3	313.5	247.6	216.6	202.4	194.5	185.9	184.5
25°	897.3	883.8	709.3	430.0	286.2	225.9	200.7	189.0	179.7	169.7	168.6
27.5°	1002.5	978.3	726.6	398.6	262.8	207.2	186.2	173.1	162.4	154.1	152.4
30°	1119.7	1080.0	741.8	379.7	241.4	190.0	167.2	154.1	144.1	138.3	137.2
32.5°	1230.7	1176.9	751.8	371.4	222.1	170.4	146.6	132.4	124.8	123.1	124.1
35°	1335.6	1264.5	750.7	363.5	204.8	150.7	126.2	111.7	105.9	106.9	106.9
37.5°	1456.3	1358.0	743.5	351.0	190.7	132.8	108.6	95.9	90.7	91.0	92.4
40°	1596.6	1465.9	739.0	327.6	175.2	116.2	94.1	83.8	80.0	78.6	78.3
42.5°	1746.3	1570.4	739.7	301.0	155.9	101.4	84.1	75.5	72.1	71.0	70.7
45°	1896.6	1670.1	740.7	273.5	135.5	90.0	76.9	69.7	67.6	66.2	66.2
47.5°	2038.0	1754.9	721.4	243.8	115.5	81.4	71.0	66.2	64.5	62.8	62.8
50°	2169.7	1811.5	674.9	209.3	99.7	74.5	66.6	63.1	61.4	59.7	59.7
52.5°	2272.2	1820.4	598.0	173.8	88.6	69.3	63.8	60.7	58.6	56.9	56.6
55°	2317.7	1764.2	488.6	140.7	80.0	64.8	61.0	57.9	55.5	53.8	53.5
57.5°	2306.0	1645.9	381.1	113.1	71.7	60.3	57.6	55.5	52.8	50.0	49.7
60°	2248.4	1487.6	287.3	94.1	64.1	55.5	53.8	52.1	48.3	44.1	43.5
62.5°	2148.7	1288.7	204.8	77.9	55.9	50.0	49.3	47.9	42.4	34.8	34.1
65°	1996.3	1046.9	137.9	64.8	47.9	43.8	44.1	41.7	34.5	25.9	25.2
67.5°	1773.5	765.5	88.3	53.1	40.0	36.6	36.9	35.5	29.3	22.1	21.0
70°	1489.7	506.9	57.6	40.3	32.1	28.3	30.3	30.7	24.8	17.9	17.2
72.5°	1092.1	299.3	40.3	30.0	23.4	19.7	24.8	25.5	20.0	13.4	12.8
75°	622.4	142.1	30.3	21.7	14.5	13.8	19.3	19.3	13.8	9.0	8.3
77.5°	261.4	59.3	21.4	14.1	8.3	7.9	13.1	12.1	6.9	4.1	4.1
80°	75.5	26.6	11.4	6.9	3.4	3.1	5.2	3.8	1.7	0.7	0.7
82.5°	29.7	11.7	4.5	2.8	1.4	1.4	0.7	0.0	0.0	0.0	0.0
85°	17.6	4.8	2.1	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.5	1.0	0.7	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)