

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: P881717

Luminaire Tested: **NAV-SB1B-730-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881717  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1B-730-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

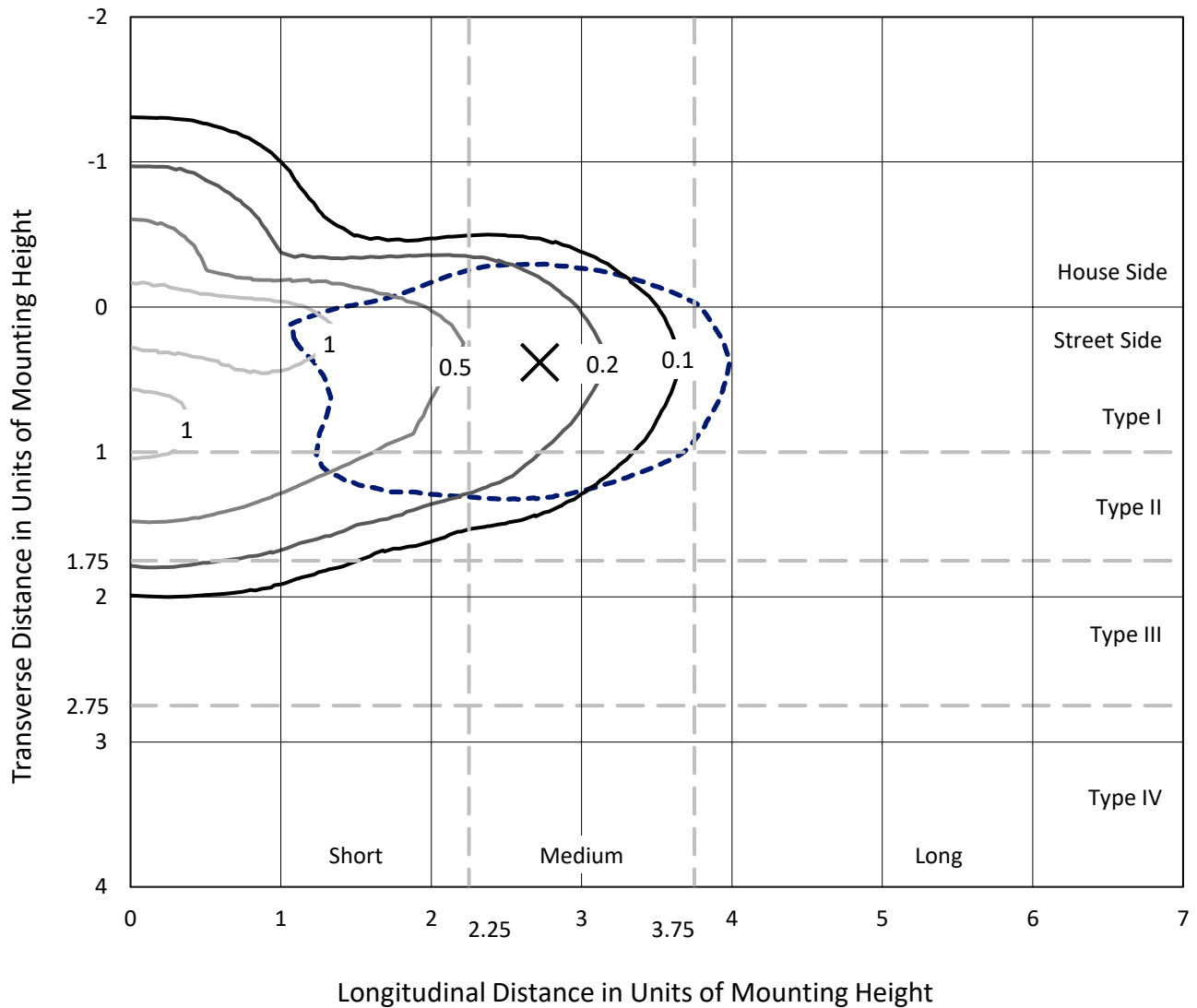
Lumens per Lamp: N/A  
Luminaire Lumens: 5497 lumens  
Efficiency: N/A  
Efficacy: 138.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 39.8  
Input Voltage (V): 120.0  
Input Current (Ain): 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



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### Iso-Footcandle Lines of Horizontal Illumination

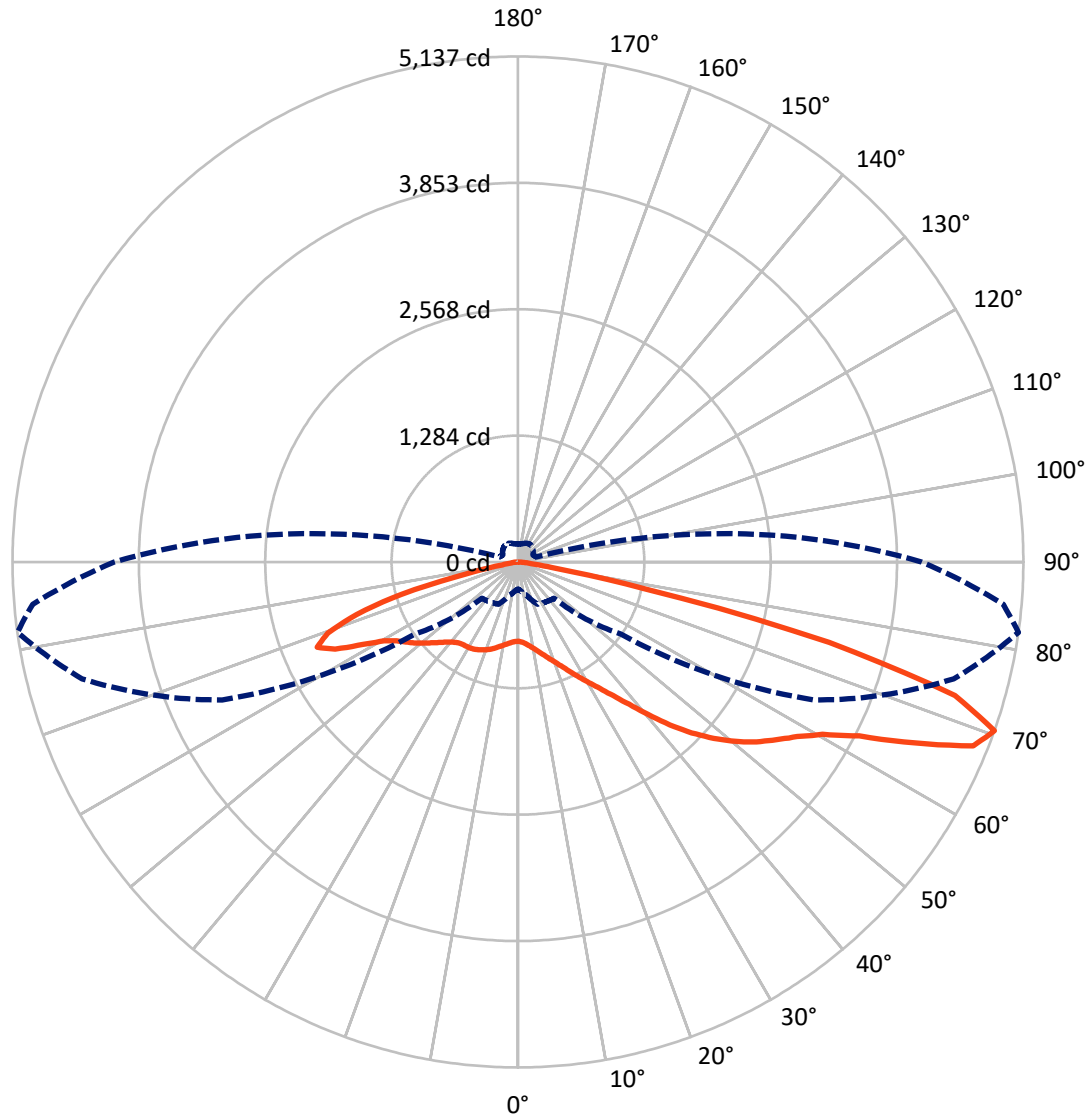
× Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1355.1	0.0	1355.1
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	4141.9	0.0	4141.9
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	5497.0	0.0	5497.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.1	1.4
10°-20°	218.6	4.0
20°-30°	365.7	6.7
30°-40°	571.4	10.4
40°-50°	910.0	16.6
50°-60°	1266.3	23.0
60°-70°	1324.6	24.1
70°-80°	692.3	12.6
80°-90°	71.9	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°	5497.0	100.0
0°-180°	5497.0	100.0

**Coefficient of Utilization**

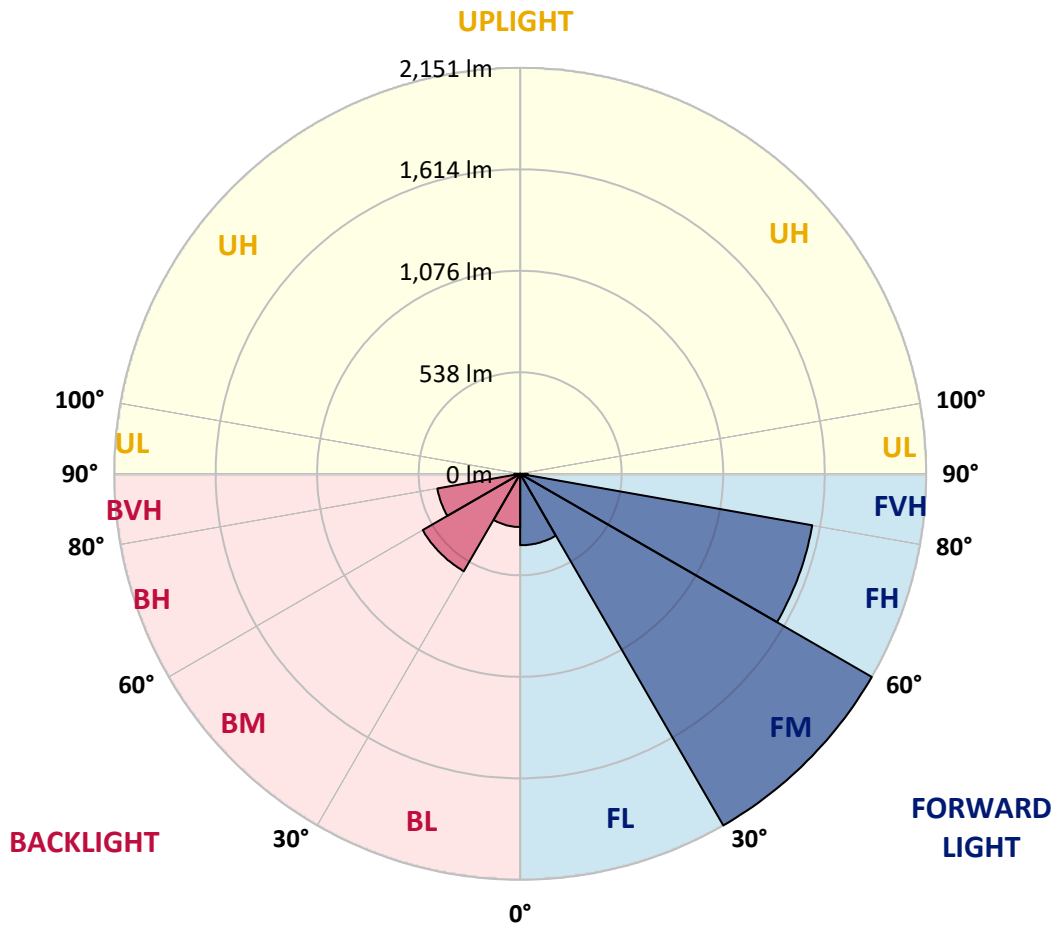


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	378.5	6.9			
FM (30°-60°)	2151.5	39.1			
FH (60°-80°)	1571.6	28.6			G1/1800
FVH (80°-90°)	40.2	0.7			G1/100
BL (0°-30°)	281.9	5.1	B1/500		
BM (30°-60°)	596.2	10.8	B1/1000		
BH (60°-80°)	445.4	8.1	B1/500		G1/500
BVH (80°-90°)	31.6	0.6			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 II Medium



REPORT NUMBER: P881717

CATALOG NUMBER: NAV-SB1B-730-U-T2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	805.9	805.9	805.9	805.9	805.9	805.9	805.9	805.9	805.9	805.9	805.9
2.5°	825.2	829.8	828.4	826.9	826.9	824.9	824.6	821.7	819.3	815.6	814.7
5°	835.7	840.6	840.1	841.2	845.0	845.9	846.8	845.0	840.3	835.7	833.6
7.5°	826.3	831.9	833.6	840.6	852.3	862.8	870.7	873.9	869.5	862.8	859.6
10°	794.8	801.0	807.1	823.7	844.4	869.2	890.2	902.8	901.9	895.5	889.9
12.5°	731.0	737.4	750.5	782.9	820.8	864.6	903.6	929.9	938.9	934.3	924.6
15°	679.9	685.5	695.4	728.6	777.9	844.4	908.6	959.6	982.7	980.1	968.4
17.5°	678.5	680.8	686.9	702.7	740.6	812.9	903.4	988.8	1032.9	1032.6	1018.0
20°	704.1	705.0	708.5	711.7	733.3	789.0	889.9	1013.0	1089.2	1089.2	1073.4
22.5°	739.7	739.1	742.6	739.7	750.2	787.0	881.5	1034.3	1151.9	1156.5	1136.7
25°	793.1	790.2	789.3	782.6	784.6	805.9	890.8	1058.5	1226.2	1235.9	1211.1
27.5°	864.3	859.6	856.4	840.9	835.7	845.0	919.4	1087.7	1309.1	1325.7	1294.2
30°	957.0	948.6	943.9	917.1	898.1	899.6	962.6	1126.5	1395.7	1422.6	1382.6
32.5°	1083.6	1070.5	1057.9	1013.9	979.2	967.8	1018.3	1180.2	1489.6	1532.5	1481.2
35°	1225.4	1214.9	1201.5	1133.5	1080.1	1053.9	1093.5	1255.1	1599.6	1667.6	1600.8
37.5°	1361.9	1352.8	1359.3	1267.7	1198.8	1160.6	1192.1	1355.8	1735.2	1835.6	1750.7
40°	1503.1	1496.1	1496.9	1409.4	1329.2	1286.3	1311.7	1482.1	1890.7	2035.4	1931.0
42.5°	1656.5	1651.2	1633.7	1556.1	1466.0	1426.1	1449.4	1627.9	2057.6	2262.9	2128.7
45°	1828.3	1825.1	1808.7	1719.8	1616.5	1571.6	1603.1	1788.9	2225.3	2477.0	2327.4
47.5°	1976.8	1979.4	1977.3	1902.4	1795.3	1729.4	1767.0	1956.9	2381.3	2678.3	2517.8
50°	2048.2	2061.9	2082.1	2058.7	1992.2	1925.1	1932.4	2119.1	2530.1	2867.0	2700.4
52.5°	2010.9	2036.8	2091.7	2129.0	2154.7	2140.7	2121.1	2280.1	2670.1	3037.3	2873.1
55°	1871.8	1908.2	1999.2	2089.3	2220.3	2322.1	2347.8	2458.6	2806.6	3187.3	3036.5
57.5°	1618.3	1677.5	1759.2	1941.5	2162.0	2409.9	2612.0	2706.3	2951.3	3347.4	3207.4
60°	1183.7	1263.0	1364.5	1635.8	1957.8	2362.9	2836.9	3086.6	3156.9	3554.8	3429.9
62.5°	757.5	806.5	899.9	1155.4	1525.5	2122.3	2905.8	3562.1	3505.5	3894.9	3763.6
65°	518.6	550.1	635.6	779.1	986.2	1579.8	2721.4	3918.5	4059.1	4433.9	4334.2
67.5°	376.9	400.8	473.7	599.4	642.6	934.9	2111.8	3902.2	4597.3	4989.3	4834.1
70°	274.8	291.7	352.9	473.7	494.4	520.1	1279.3	3317.1	4585.6	5136.9	4951.1
72.5°	203.6	215.3	256.4	367.5	400.2	351.2	633.3	2410.8	3940.4	4646.3	4497.2
75°	147.3	156.1	186.4	281.2	320.3	267.5	315.9	1408.8	2748.6	3268.3	3294.6
77.5°	112.6	119.3	139.1	205.9	256.4	200.7	196.0	648.1	1303.3	1309.7	1383.2
80°	90.4	94.8	105.6	145.0	196.6	150.2	127.8	261.6	411.9	348.6	365.8
82.5°	66.5	73.8	89.3	101.8	140.6	103.5	77.9	132.1	156.6	134.8	135.9
85°	37.9	42.9	54.0	72.9	89.8	63.3	44.6	58.6	72.9	59.8	53.4
87.5°	13.4	17.5	19.0	28.6	39.1	26.3	17.2	16.9	23.9	17.8	14.9
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: P881717  
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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	805.9	805.9	805.9	805.9	805.9	805.9	805.9	805.9	805.9	805.9	805.9
2.5°	811.8	810.3	804.5	796.6	788.4	780.6	777.9	772.4	768.6	766.6	768.9
5°	828.1	823.4	809.7	792.2	773.8	754.0	740.0	727.2	717.8	709.1	712.6
7.5°	851.4	843.3	819.6	789.0	756.3	723.4	698.9	680.2	667.7	659.5	661.3
10°	878.6	866.0	829.8	784.1	733.6	686.3	657.5	641.4	633.5	629.2	630.3
12.5°	909.8	892.0	840.3	772.7	698.9	644.9	625.1	620.4	620.7	621.0	621.6
15°	948.3	923.5	848.8	747.9	653.7	613.1	609.6	617.2	625.1	628.9	628.6
17.5°	991.7	956.7	850.3	707.0	609.3	592.7	603.8	620.1	632.1	637.3	638.5
20°	1038.4	990.6	839.8	649.3	572.9	576.1	595.9	616.9	630.0	636.8	638.5
22.5°	1091.8	1026.7	814.7	588.6	543.1	558.0	581.3	601.7	615.5	622.2	623.9
25°	1152.7	1067.3	775.3	537.6	517.5	537.6	560.9	577.8	588.9	595.0	596.8
27.5°	1220.4	1109.6	722.8	497.0	495.0	516.6	535.8	549.0	554.8	559.5	561.2
30°	1288.4	1148.1	659.2	466.4	475.4	495.9	509.6	515.4	517.2	518.0	520.1
32.5°	1361.9	1181.3	592.4	441.0	456.8	475.7	483.9	486.5	478.4	472.8	474.6
35°	1450.8	1216.9	527.1	420.9	438.4	454.7	457.4	455.0	445.4	434.0	434.6
37.5°	1560.8	1261.3	474.9	406.6	421.2	432.0	428.8	428.2	429.1	415.7	416.5
40°	1695.6	1319.0	436.7	395.5	407.2	409.5	400.5	405.4	409.8	389.4	390.0
42.5°	1845.2	1388.7	412.4	387.9	395.5	390.0	376.0	381.5	380.9	354.1	353.8
45°	1997.8	1464.6	404.0	382.4	384.7	373.7	358.2	359.6	347.4	323.2	324.1
47.5°	2149.4	1545.9	409.2	377.7	371.3	358.8	346.8	340.4	322.3	304.2	304.2
50°	2298.2	1631.4	428.5	368.4	352.9	345.6	336.9	325.5	306.3	290.8	289.6
52.5°	2436.2	1717.4	450.1	352.9	329.9	334.3	328.7	315.6	296.6	280.9	281.2
55°	2566.8	1803.5	458.5	331.6	308.3	324.4	321.1	296.9	274.2	261.4	260.2
57.5°	2709.2	1907.0	449.2	304.5	290.8	313.0	300.7	273.9	260.8	251.1	250.3
60°	2906.4	2069.5	429.1	271.0	274.2	296.1	275.1	264.0	249.7	238.9	238.3
62.5°	3233.9	2372.6	396.7	237.7	254.6	271.0	262.8	251.7	237.1	226.6	226.6
65°	3718.1	2793.8	335.7	211.8	232.8	246.5	249.7	238.6	223.4	212.3	212.9
67.5°	4126.5	3058.0	254.1	190.2	210.3	226.6	235.7	224.9	208.8	198.1	198.3
70°	4104.0	2866.1	194.0	168.9	190.5	207.1	218.8	210.3	193.1	182.9	183.8
72.5°	3645.2	2397.7	156.9	147.3	170.3	186.7	200.7	194.3	176.8	166.8	166.8
75°	2678.0	1702.0	125.4	125.4	145.3	165.4	180.8	176.8	160.7	153.7	151.7
77.5°	1128.8	714.0	98.3	104.1	120.8	142.1	161.3	162.8	148.8	157.5	142.9
80°	300.1	196.9	75.0	82.0	94.8	117.3	140.3	139.7	124.6	116.4	108.2
82.5°	114.3	77.6	53.4	57.8	68.5	89.8	111.1	114.6	99.5	86.0	86.0
85°	44.0	33.3	33.0	34.7	40.0	59.5	84.0	86.9	75.0	63.6	65.6
87.5°	11.4	9.9	12.3	11.7	18.4	31.8	48.1	49.9	45.8	26.5	37.9
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)