

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: P881727

Luminaire Tested: **NAV-SB1B-735-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881727  
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-735-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

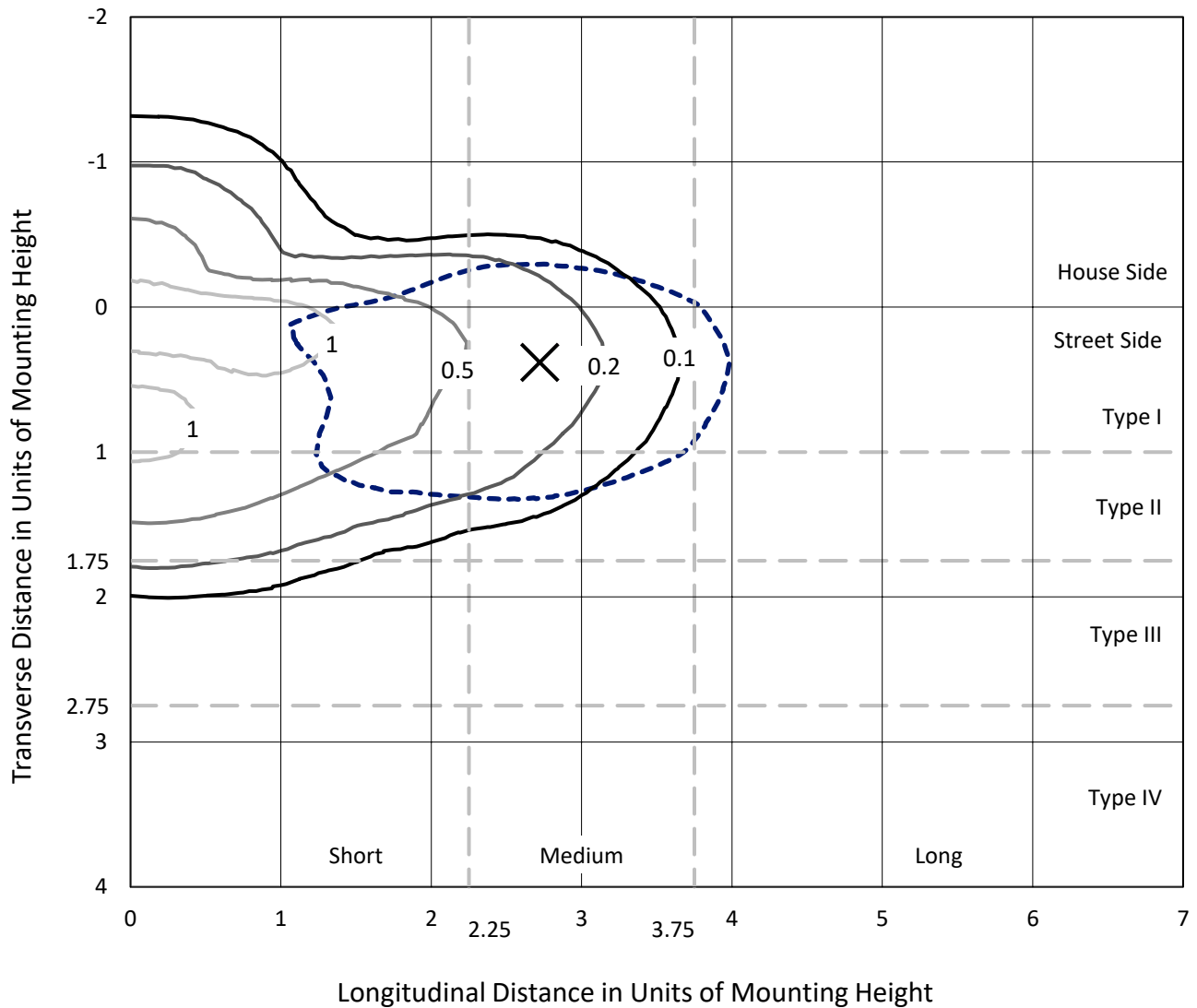
Lumens per Lamp: N/A  
Luminaire Lumens: 5584 lumens  
Efficiency: N/A  
Efficacy: 140.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 39.8  
Input Voltage (V): 120.0  
Input Current (Ain): 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

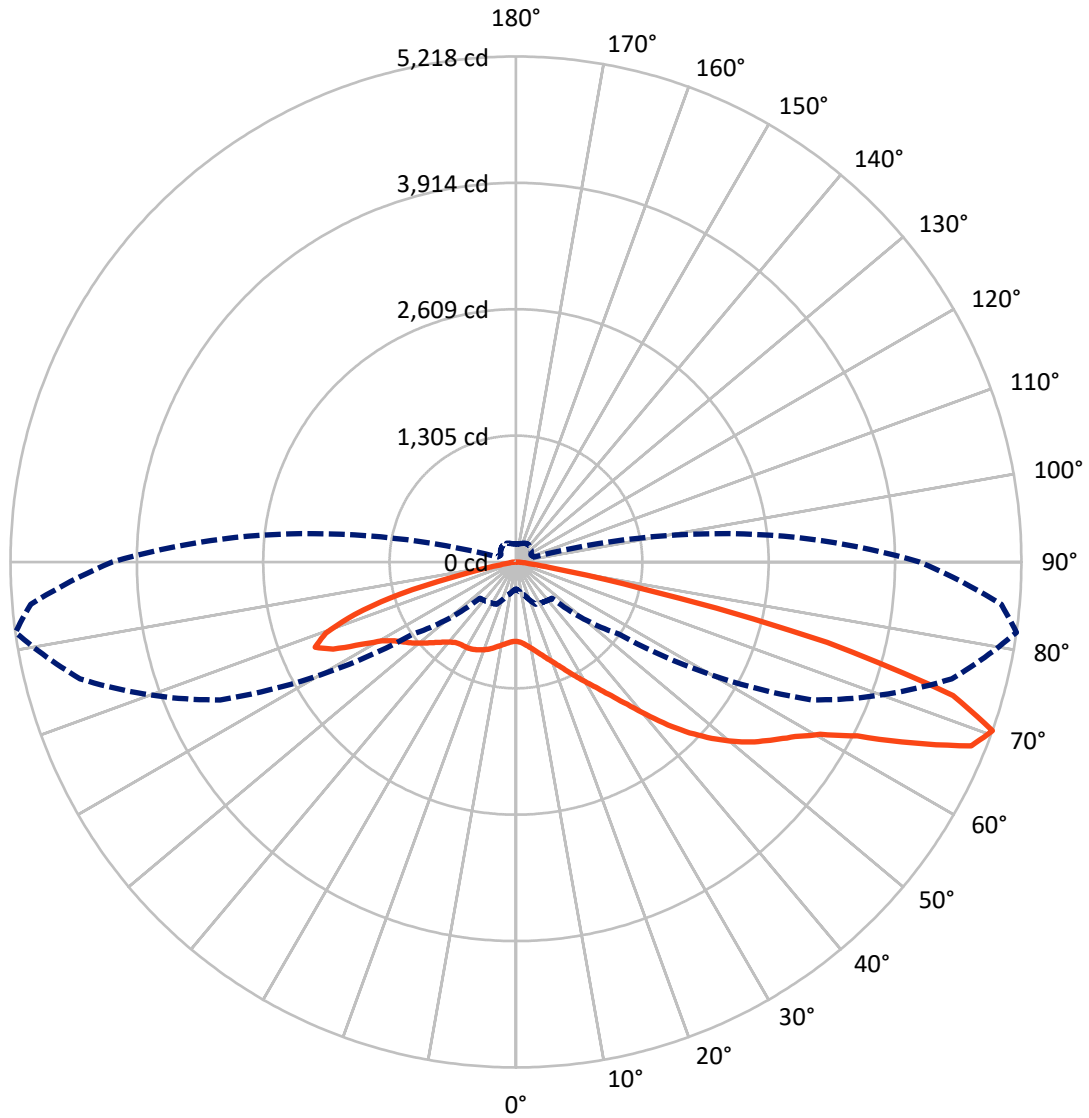
× Max cd  
 - - - 1/2 Max cd



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	1376.6	0.0	1376.6
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	4207.4	0.0	4207.4
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	5584.0	0.0	5584.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.3	1.4
10°-20°	222.1	4.0
20°-30°	371.5	6.7
30°-40°	580.4	10.4
40°-50°	924.4	16.6
50°-60°	1286.4	23.0
60°-70°	1345.6	24.1
70°-80°	703.3	12.6
80°-90°	73.0	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°	5584.0	100.0
0°-180°	5584.0	100.0

**Coefficient of Utilization**



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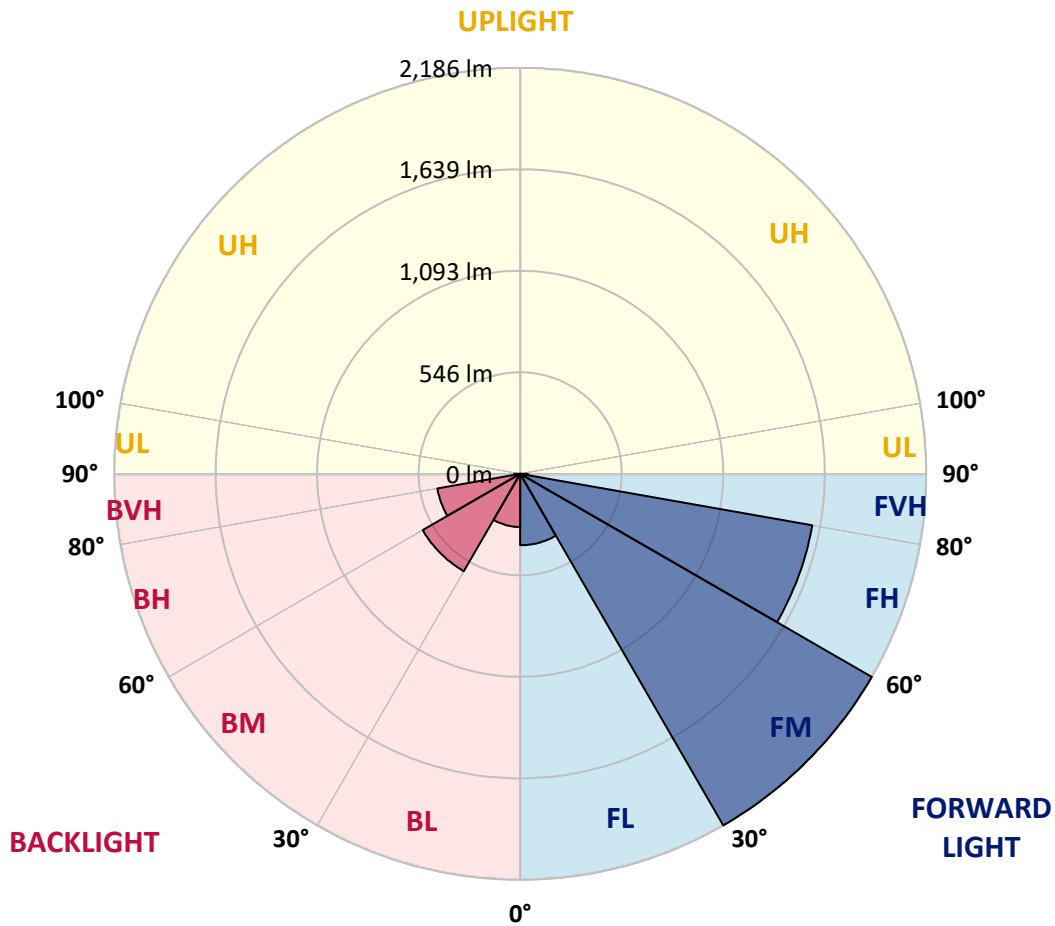
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	384.5	6.9			
FM (30°-60°)	2185.5	39.1			
FH (60°-80°)	1596.5	28.6			G1/1800
FVH (80°-90°)	40.9	0.7			G1/100
BL (0°-30°)	286.4	5.1	B1/500		
BM (30°-60°)	605.6	10.8	B1/1000		
BH (60°-80°)	452.4	8.1	B1/500		G1/500
BVH (80°-90°)	32.1	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



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7
2.5°	838.2	843.0	841.5	840.0	840.0	837.9	837.6	834.7	832.3	828.5	827.6
5°	848.9	853.9	853.4	854.5	858.4	859.3	860.2	858.4	853.6	848.9	846.8
7.5°	839.4	845.1	846.8	853.9	865.8	876.5	884.5	887.7	883.3	876.5	873.2
10°	807.4	813.6	819.9	836.8	857.8	883.0	904.3	917.1	916.2	909.6	904.0
12.5°	742.5	749.1	762.4	795.3	833.8	878.2	917.9	944.6	953.8	949.1	939.3
15°	690.7	696.3	706.4	740.2	790.2	857.8	923.0	974.8	998.2	995.6	983.7
17.5°	689.2	691.6	697.8	713.8	752.3	825.8	917.6	1004.5	1049.2	1048.9	1034.1
20°	715.3	716.2	719.7	723.0	744.9	801.5	904.0	1029.1	1106.4	1106.4	1090.4
22.5°	751.4	750.8	754.4	751.4	762.1	799.4	895.4	1050.7	1170.1	1174.8	1154.7
25°	805.6	802.7	801.8	795.0	797.1	818.7	904.9	1075.3	1245.7	1255.4	1230.2
27.5°	877.9	873.2	869.9	854.2	848.9	858.4	933.9	1104.9	1329.8	1346.7	1314.7
30°	972.2	963.6	958.8	931.6	912.3	913.8	977.8	1144.3	1417.8	1445.1	1404.5
32.5°	1100.8	1087.4	1074.7	1029.9	994.7	983.1	1034.4	1198.8	1513.2	1556.8	1504.6
35°	1244.8	1234.1	1220.5	1151.4	1097.2	1070.5	1110.8	1275.0	1624.9	1694.0	1626.1
37.5°	1383.4	1374.3	1380.8	1287.7	1217.8	1179.0	1211.0	1377.2	1762.7	1864.6	1778.4
40°	1526.8	1519.7	1520.6	1431.7	1350.3	1306.7	1332.5	1505.5	1920.6	2067.6	1961.5
42.5°	1682.7	1677.4	1659.6	1580.8	1489.2	1448.6	1472.3	1653.7	2090.1	2298.7	2162.4
45°	1857.2	1854.0	1837.4	1747.0	1642.1	1596.5	1628.5	1817.2	2260.5	2516.2	2364.2
47.5°	2008.0	2010.7	2008.6	1932.5	1823.7	1756.8	1795.0	1987.9	2419.0	2720.7	2557.7
50°	2080.6	2094.6	2115.0	2091.3	2023.7	1955.6	1963.0	2152.6	2570.1	2912.4	2743.2
52.5°	2042.7	2069.1	2124.8	2162.7	2188.8	2174.6	2154.7	2316.2	2712.4	3085.4	2918.6
55°	1901.4	1938.4	2030.9	2122.4	2255.5	2358.9	2384.9	2497.5	2851.0	3237.7	3084.5
57.5°	1643.9	1704.0	1787.0	1972.2	2196.2	2448.1	2653.4	2749.1	2998.0	3400.4	3258.1
60°	1202.4	1283.0	1386.1	1661.7	1988.8	2400.3	2881.8	3135.5	3206.9	3611.0	3484.2
62.5°	769.5	819.3	914.1	1173.7	1549.7	2155.9	2951.8	3618.4	3561.0	3956.5	3823.2
65°	526.8	558.8	645.6	791.4	1001.8	1604.8	2764.5	3980.5	4123.3	4504.1	4402.8
67.5°	382.8	407.1	481.2	608.9	652.8	949.6	2145.2	3963.9	4670.0	5068.3	4910.6
70°	279.1	296.3	358.5	481.2	502.2	528.3	1299.6	3369.6	4658.2	5218.2	5029.4
72.5°	206.8	218.7	260.5	373.3	406.5	356.7	643.3	2448.9	4002.8	4719.8	4568.4
75°	149.6	158.5	189.3	285.6	325.3	271.7	320.9	1431.1	2792.1	3320.1	3346.7
77.5°	114.4	121.2	141.3	209.2	260.5	203.9	199.1	658.4	1323.9	1330.4	1405.1
80°	91.9	96.3	107.3	147.3	199.7	152.6	129.8	265.8	418.4	354.1	371.6
82.5°	67.6	75.0	90.7	103.4	142.8	105.2	79.1	134.2	159.1	136.9	138.1
85°	38.5	43.6	54.8	74.1	91.3	64.3	45.3	59.6	74.1	60.7	54.2
87.5°	13.6	17.8	19.3	29.0	39.7	26.7	17.5	17.2	24.3	18.1	15.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7	818.7
2.5°	824.6	823.1	817.2	809.2	800.9	792.9	790.2	784.6	780.8	778.7	781.1
5°	841.2	836.5	822.5	804.8	786.1	765.9	751.7	738.7	729.2	720.3	723.9
7.5°	864.9	856.6	832.6	801.5	768.3	734.8	709.9	691.0	678.2	669.9	671.7
10°	892.5	879.7	843.0	796.5	745.2	697.2	667.9	651.6	643.6	639.1	640.3
12.5°	924.2	906.1	853.6	784.9	709.9	655.1	635.0	630.2	630.5	630.8	631.4
15°	963.3	938.1	862.2	759.7	664.0	622.8	619.3	627.0	635.0	638.8	638.5
17.5°	1007.4	971.9	863.7	718.2	619.0	602.1	613.3	629.9	642.1	647.4	648.6
20°	1054.8	1006.2	853.1	659.6	581.9	585.2	605.3	626.7	640.0	646.8	648.6
22.5°	1109.1	1043.0	827.6	597.9	551.7	566.8	590.5	611.3	625.2	632.0	633.8
25°	1171.0	1084.2	787.6	546.1	525.6	546.1	569.8	587.0	598.2	604.5	606.2
27.5°	1239.7	1127.1	734.2	504.9	502.8	524.8	544.3	557.6	563.6	568.3	570.1
30°	1308.8	1166.2	669.6	473.8	483.0	503.7	517.6	523.6	525.3	526.2	528.3
32.5°	1383.4	1200.0	601.8	448.0	464.0	483.3	491.6	494.2	485.9	480.3	482.1
35°	1473.8	1236.2	535.4	427.6	445.3	461.9	464.6	462.2	452.5	440.9	441.5
37.5°	1585.5	1281.2	482.4	413.0	427.9	438.8	435.6	435.0	435.9	422.2	423.1
40°	1722.4	1339.9	443.6	401.8	413.6	416.0	406.8	411.9	416.3	395.6	396.2
42.5°	1874.4	1410.7	419.0	394.1	401.8	396.2	381.9	387.6	387.0	359.7	359.4
45°	2029.4	1487.7	410.4	388.5	390.8	379.6	363.9	365.3	352.9	328.3	329.2
47.5°	2183.5	1570.4	415.7	383.7	377.2	364.5	352.3	345.8	327.4	309.0	309.0
50°	2334.6	1657.2	435.3	374.2	358.5	351.1	342.2	330.7	311.1	295.4	294.2
52.5°	2474.7	1744.6	457.2	358.5	335.1	339.6	333.9	320.6	301.3	285.3	285.6
55°	2607.5	1832.0	465.8	336.9	313.2	329.5	326.2	301.6	278.5	265.5	264.3
57.5°	2752.1	1937.2	456.3	309.3	295.4	317.9	305.5	278.2	264.9	255.1	254.2
60°	2952.4	2102.3	435.9	275.3	278.5	300.7	279.4	268.2	253.6	242.7	242.1
62.5°	3285.1	2410.1	403.0	241.5	258.7	275.3	267.0	255.7	240.9	230.2	230.2
65°	3777.0	2838.0	341.0	215.1	236.4	250.4	253.6	242.4	227.0	215.7	216.3
67.5°	4191.8	3106.4	258.1	193.2	213.6	230.2	239.4	228.4	212.2	201.2	201.5
70°	4169.0	2911.5	197.0	171.6	193.5	210.4	222.2	213.6	196.2	185.8	186.7
72.5°	3702.9	2435.6	159.4	149.6	173.0	189.6	203.9	197.3	179.6	169.5	169.5
75°	2720.4	1728.9	127.4	127.4	147.6	168.0	183.7	179.6	163.3	156.2	154.1
77.5°	1146.7	725.3	99.9	105.8	122.7	144.3	163.9	165.3	151.1	160.0	145.2
80°	304.9	200.0	76.1	83.3	96.3	119.1	142.5	141.9	126.5	118.2	109.9
82.5°	116.2	78.8	54.2	58.7	69.6	91.3	112.9	116.4	101.0	87.4	87.4
85°	44.7	33.8	33.5	35.3	40.6	60.4	85.3	88.3	76.1	64.6	66.7
87.5°	11.6	10.1	12.4	11.9	18.7	32.3	48.9	50.7	46.5	27.0	38.5
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)