

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: P881909

Luminaire Tested: **NAV-SB1C-740-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881909  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1C-740-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

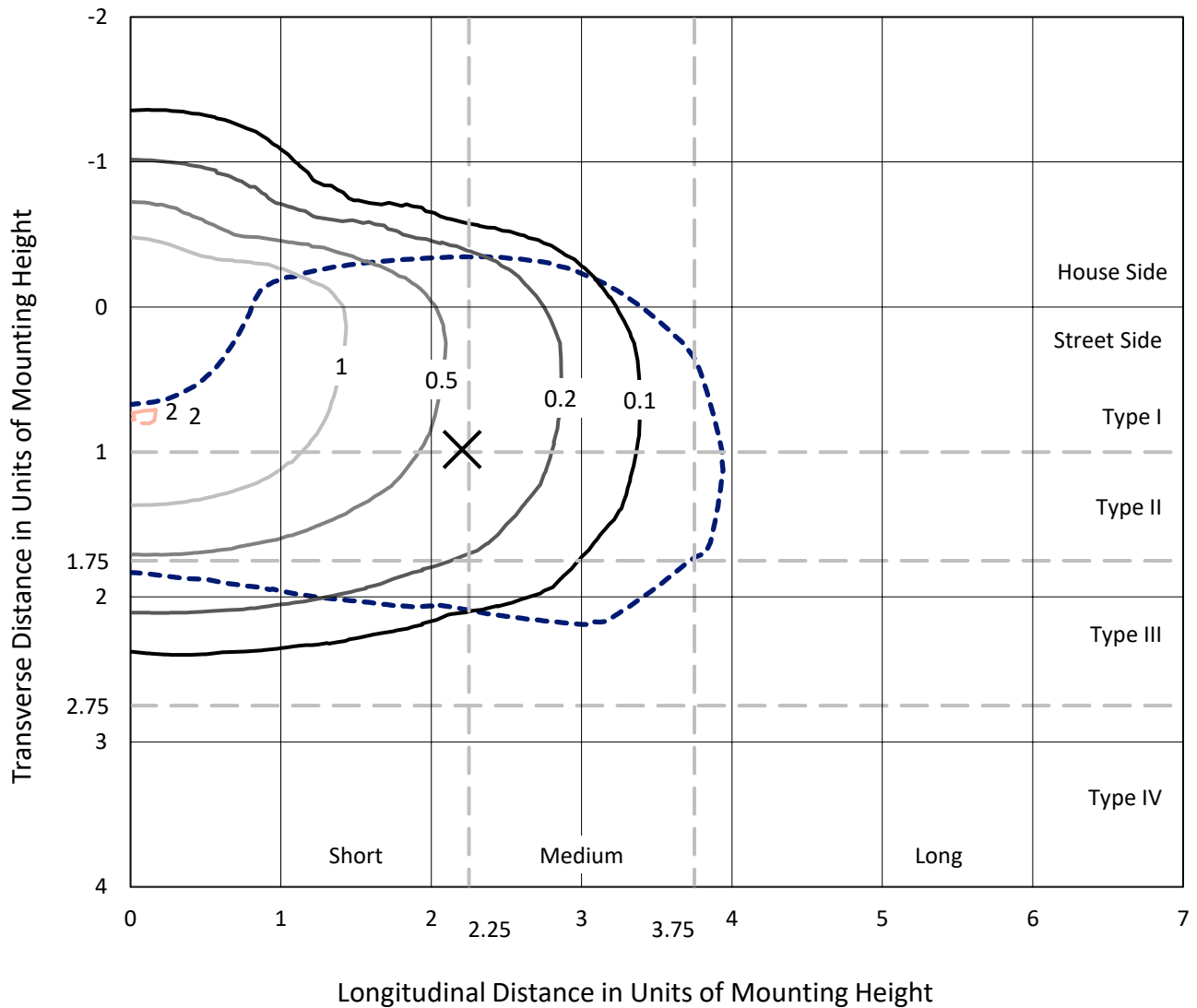
Lumens per Lamp: N/A  
Luminaire Lumens: 8086 lumens  
Efficiency: N/A  
Efficacy: 148.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 54.4  
Input Voltage (V): 120.0  
Input Current (Ain): 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

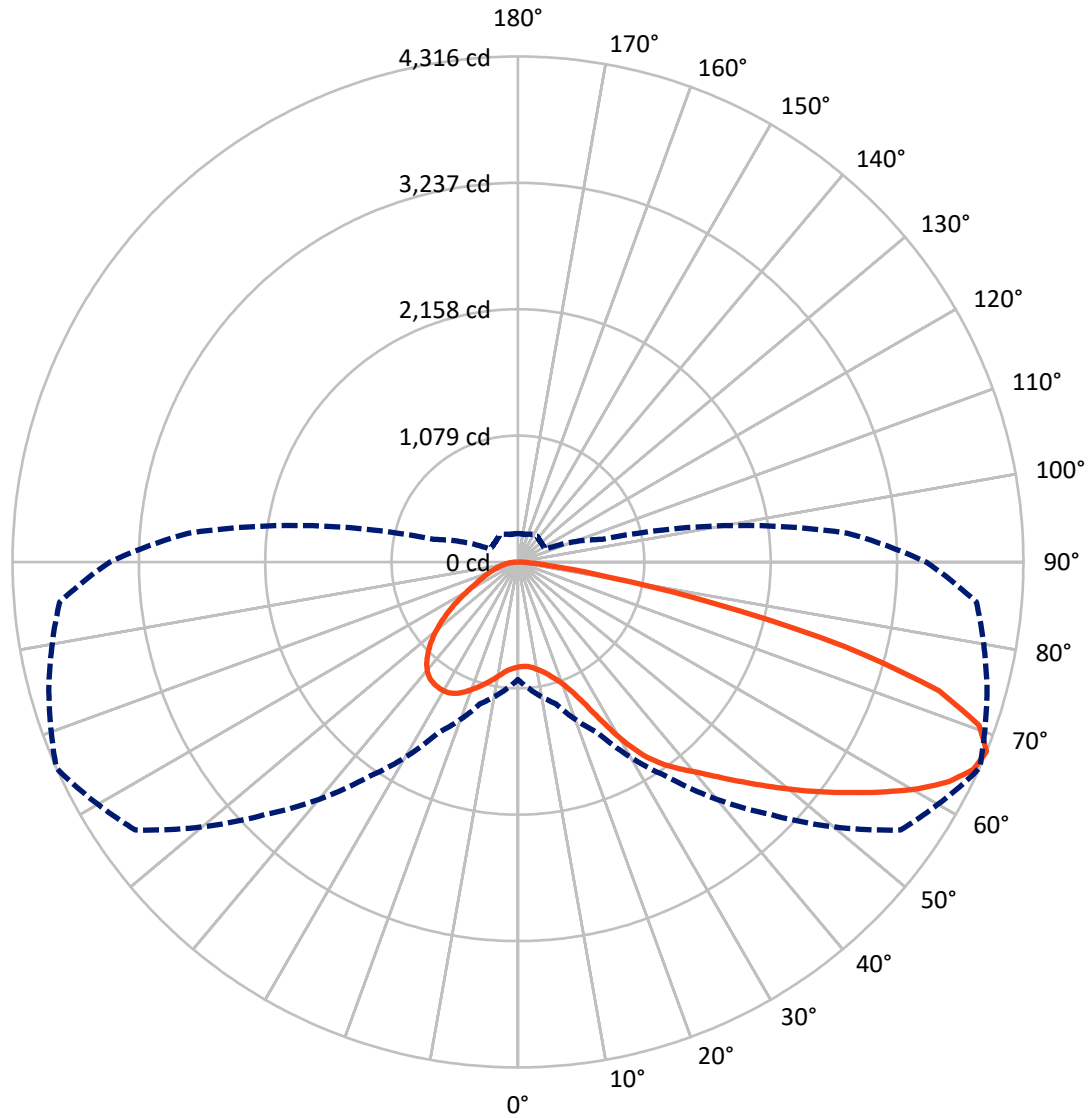
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2010.6	0.0	2010.6
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	6075.4	0.0	6075.4
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	8086.0	0.0	8086.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.9	1.1
10°-20°	293.8	3.6
20°-30°	566.2	7.0
30°-40°	992.8	12.3
40°-50°	1476.0	18.3
50°-60°	1871.0	23.1
60°-70°	1830.7	22.6
70°-80°	873.3	10.8
80°-90°	93.3	1.2
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°	8086.0	100.0
0°-180°	8086.0	100.0

**Coefficient of Utilization**



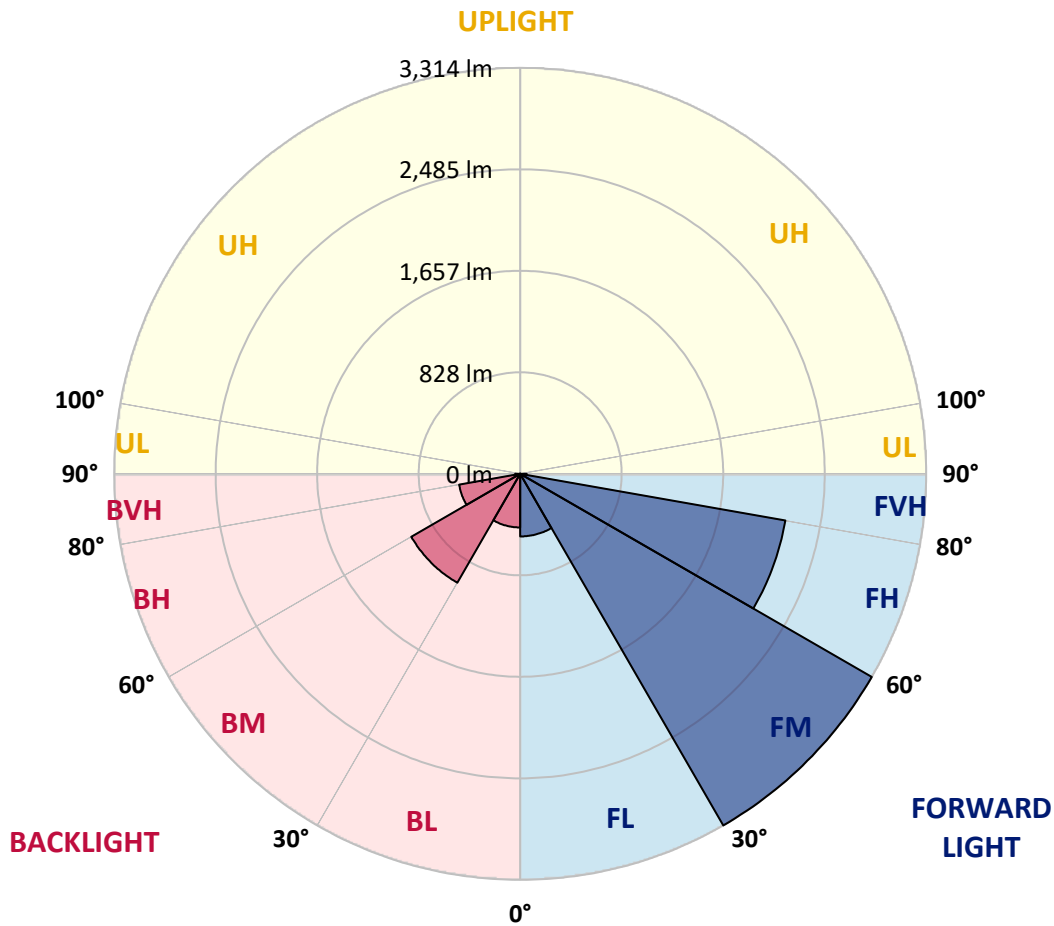
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	511.0	6.3			
FM (30°-60°)	3313.6	41.0			
FH (60°-80°)	2198.0	27.2			G2/5000
FVH (80°-90°)	52.9	0.7			G1/100
BL (0°-30°)	438.0	5.4	B1/500		
BM (30°-60°)	1026.2	12.7	B2/2500		
BH (60°-80°)	506.0	6.3	B2/1000		G2/1000
BVH (80°-90°)	40.4	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8
2.5°	887.5	892.6	891.3	889.2	888.8	889.6	890.9	892.2	891.7	893.9	897.3
5°	884.9	890.0	889.6	889.6	891.3	894.7	896.8	899.0	896.8	899.4	904.1
7.5°	886.6	890.5	892.2	893.9	898.1	904.5	909.6	914.3	911.7	914.7	920.6
10°	908.3	911.3	913.0	913.0	916.0	923.2	928.3	936.8	934.7	939.3	947.0
12.5°	947.8	950.8	950.8	949.1	951.2	955.9	957.6	966.9	963.1	970.8	978.4
15°	996.3	1002.2	997.5	994.6	995.4	1000.1	999.7	1006.9	1003.1	1009.4	1016.2
17.5°	1049.8	1057.4	1049.8	1049.4	1047.7	1052.8	1053.2	1059.6	1052.8	1057.4	1062.1
20°	1113.1	1123.7	1117.3	1119.5	1115.6	1117.8	1119.9	1129.2	1118.6	1122.0	1120.7
22.5°	1202.3	1215.1	1208.3	1216.3	1213.8	1212.1	1211.7	1228.2	1211.7	1212.9	1200.6
25°	1332.3	1347.6	1335.7	1346.8	1346.8	1352.3	1358.6	1379.9	1352.3	1344.2	1312.3
27.5°	1524.3	1539.6	1516.3	1523.1	1520.9	1534.5	1527.7	1580.4	1550.7	1537.5	1473.4
30°	1755.5	1782.6	1738.5	1736.8	1734.6	1756.3	1766.1	1800.9	1770.7	1757.6	1680.3
32.5°	2005.3	2033.7	1981.0	1965.8	1957.7	1970.8	1962.8	1990.8	1970.0	1949.6	1854.0
35°	2269.5	2297.6	2247.4	2217.7	2185.4	2157.8	2128.9	2136.1	2116.6	2085.6	1986.6
37.5°	2519.3	2570.7	2517.6	2485.8	2426.3	2372.3	2291.6	2258.0	2239.8	2211.3	2111.5
40°	2773.8	2803.1	2762.8	2735.6	2671.0	2586.4	2457.3	2386.3	2361.7	2334.1	2249.5
42.5°	2961.2	2989.2	2967.5	2948.8	2898.3	2800.1	2633.2	2544.4	2508.7	2477.7	2405.9
45°	3109.9	3130.7	3117.1	3123.9	3102.2	3007.0	2815.4	2713.9	2676.9	2639.1	2582.6
47.5°	3169.8	3191.8	3213.5	3253.9	3290.8	3220.7	3011.3	2897.4	2858.3	2819.7	2764.0
50°	3163.0	3185.5	3248.4	3334.2	3448.9	3425.5	3217.8	3092.9	3056.7	3012.6	2961.2
52.5°	3108.6	3134.1	3214.8	3357.5	3540.2	3578.9	3428.1	3294.7	3260.7	3208.0	3156.6
55°	2965.8	2981.1	3102.2	3304.4	3561.9	3685.9	3634.1	3509.6	3475.6	3402.1	3346.1
57.5°	2701.2	2723.2	2899.6	3161.3	3507.5	3758.6	3815.1	3735.6	3702.9	3597.1	3538.5
60°	2355.8	2391.0	2592.8	2920.8	3369.0	3758.2	3979.5	3957.8	3930.7	3789.2	3728.0
62.5°	1964.9	2005.7	2199.8	2580.9	3126.8	3651.5	4082.3	4143.9	4129.9	3966.3	3888.2
65°	1509.0	1537.1	1730.4	2141.2	2750.0	3422.5	4094.2	4270.9	4273.5	4101.0	3971.9
67.5°	1004.8	1085.5	1253.3	1606.8	2245.3	3048.3	3989.7	4291.8	4316.4	4147.3	3929.8
70°	490.3	596.5	760.9	1044.3	1606.8	2474.3	3716.5	4121.0	4175.8	4012.2	3679.1
72.5°	203.5	237.9	327.6	515.3	922.3	1669.6	3167.6	3657.9	3759.4	3555.1	3093.3
75°	137.2	148.7	187.4	264.3	420.2	823.3	2284.4	2727.5	2891.1	2685.0	2194.7
77.5°	105.8	113.0	136.4	184.8	249.8	311.4	1222.7	1643.7	1728.3	1600.0	1142.0
80°	83.3	88.8	102.0	134.7	177.2	166.5	416.8	744.8	793.6	665.7	367.1
82.5°	72.2	74.3	73.1	91.3	117.7	97.3	136.8	274.9	303.3	220.1	119.8
85°	52.3	58.2	60.8	56.5	62.5	49.3	56.1	97.3	107.1	95.6	67.6
87.5°	21.2	31.4	38.7	36.5	22.9	14.0	17.4	28.5	32.7	35.7	22.1
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°	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8	896.8
2.5°	897.7	900.7	902.8	905.3	907.0	909.6	914.7	917.7	918.1	920.2	919.8
5°	905.8	910.0	914.7	921.5	929.1	935.5	945.3	952.1	954.6	956.7	956.3
7.5°	923.2	929.1	937.6	949.5	960.6	969.1	981.0	989.0	997.1	1000.1	1000.5
10°	949.1	957.6	969.9	986.1	998.0	1009.0	1021.3	1028.1	1036.2	1039.6	1041.3
12.5°	981.4	990.3	1006.5	1029.0	1040.0	1047.7	1051.9	1050.2	1051.9	1054.9	1055.7
15°	1018.3	1028.1	1046.4	1070.6	1078.3	1071.5	1062.1	1053.6	1052.3	1053.2	1056.2
17.5°	1062.1	1069.3	1090.6	1111.0	1105.4	1077.4	1057.0	1043.4	1036.6	1034.5	1037.5
20°	1123.3	1123.3	1140.7	1153.4	1116.5	1068.9	1037.0	1015.0	1000.9	995.0	993.7
22.5°	1197.6	1190.8	1201.9	1193.0	1114.4	1045.1	1000.9	962.7	941.5	933.0	931.7
25°	1291.9	1283.9	1280.9	1225.7	1099.1	1007.3	935.5	889.2	870.5	865.8	866.7
27.5°	1434.3	1413.9	1375.2	1243.5	1071.0	947.8	859.0	816.1	805.5	805.9	807.2
30°	1623.8	1583.0	1488.2	1246.5	1025.1	863.7	780.9	750.3	745.2	747.3	754.5
32.5°	1799.2	1760.6	1603.8	1232.9	954.6	781.3	710.8	690.4	682.7	685.3	688.7
35°	1936.9	1926.2	1710.8	1213.8	868.0	704.0	647.9	630.5	615.6	612.2	614.7
37.5°	2066.9	2062.6	1791.1	1187.0	782.1	649.2	597.3	574.4	552.7	540.8	541.3
40°	2209.6	2205.4	1843.8	1145.8	706.1	601.6	551.9	521.7	494.9	473.3	475.4
42.5°	2370.2	2345.1	1868.9	1086.7	641.5	561.2	514.9	474.1	438.9	418.9	420.2
45°	2545.7	2489.2	1868.5	1011.6	587.1	524.3	475.4	417.6	384.9	366.2	365.4
47.5°	2731.7	2626.8	1845.5	928.3	534.5	483.5	414.2	370.0	348.4	336.9	334.4
50°	2923.8	2755.5	1806.4	832.7	480.5	437.2	376.0	345.8	329.3	318.6	314.8
52.5°	3104.3	2872.4	1759.3	724.4	425.7	392.1	359.0	335.6	318.2	306.3	301.2
55°	3272.1	2973.1	1692.6	613.5	381.1	362.0	350.9	331.4	311.4	297.4	291.9
57.5°	3421.3	3038.5	1577.4	509.4	349.2	341.1	342.4	324.2	301.2	289.3	281.7
60°	3545.3	3086.5	1407.1	412.9	323.3	320.8	329.3	310.6	283.8	270.2	264.3
62.5°	3619.7	3085.6	1198.1	338.2	301.2	302.1	311.8	293.6	266.4	253.6	249.8
65°	3613.3	3010.0	968.6	289.3	280.0	280.8	293.6	274.9	251.9	244.3	243.9
67.5°	3485.4	2825.6	743.1	257.5	256.6	260.4	275.3	262.1	243.0	242.2	243.4
70°	3139.2	2442.8	535.3	232.0	232.4	237.9	257.5	254.1	238.3	240.0	239.6
72.5°	2517.2	1862.5	359.4	205.2	205.6	214.5	240.5	247.7	233.7	256.2	259.6
75°	1676.4	1161.5	231.1	176.7	177.2	188.6	225.6	235.4	220.9	255.3	257.5
77.5°	805.5	522.1	167.4	148.7	148.7	159.3	195.0	210.7	188.2	198.4	181.8
80°	278.3	196.3	131.7	119.8	117.3	124.5	164.4	182.7	162.3	149.5	140.2
82.5°	109.6	102.0	105.8	93.0	84.5	89.2	127.9	150.8	119.4	107.9	107.5
85°	62.9	66.3	74.8	61.6	48.9	54.8	93.9	108.3	90.1	79.4	81.1
87.5°	17.0	23.4	34.4	31.9	22.1	23.4	44.6	59.9	51.8	39.9	41.2
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)