

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: P960822

Luminaire Tested: **NAV-SB1D-727-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960822
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-727-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7590.1 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

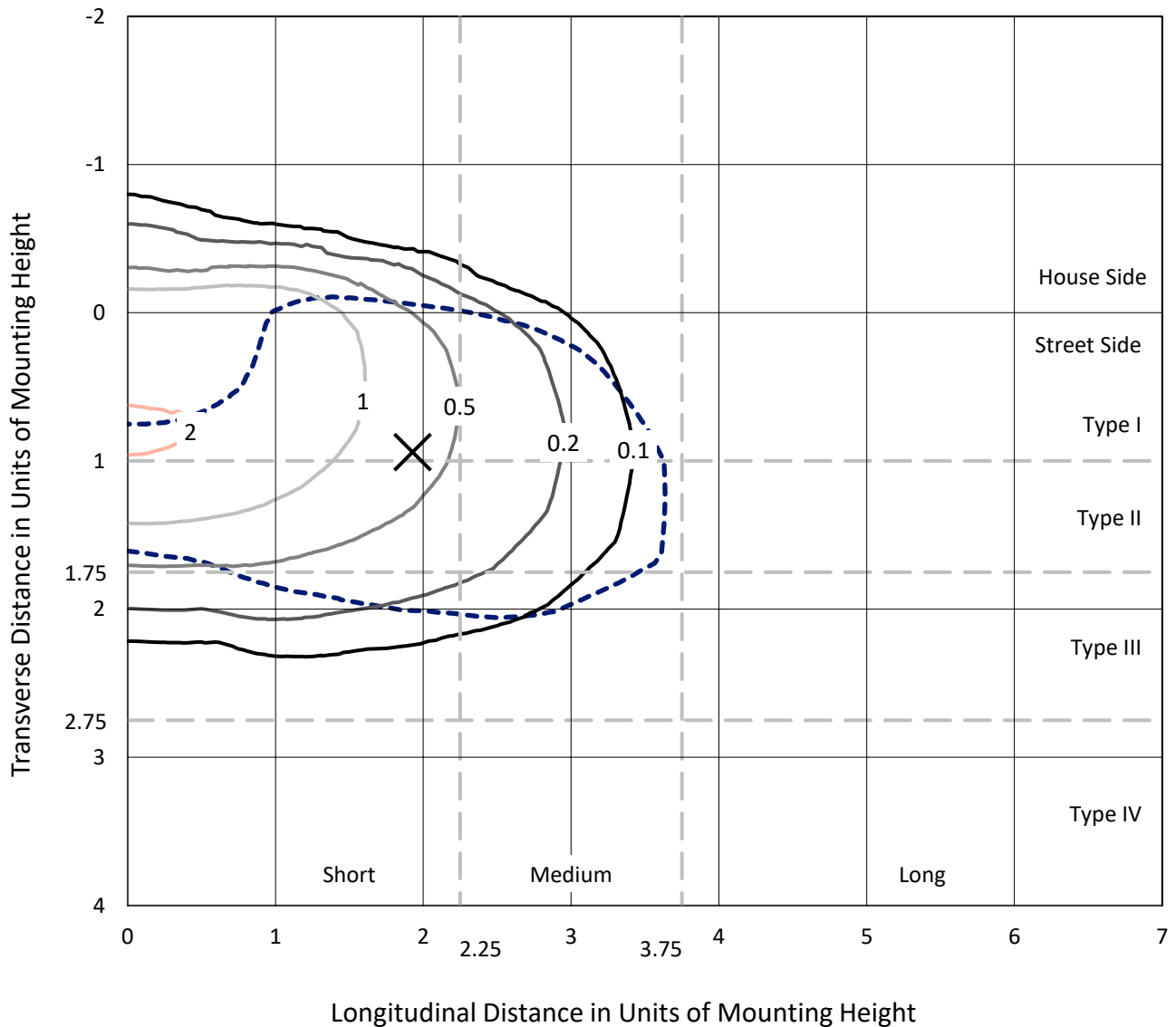
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

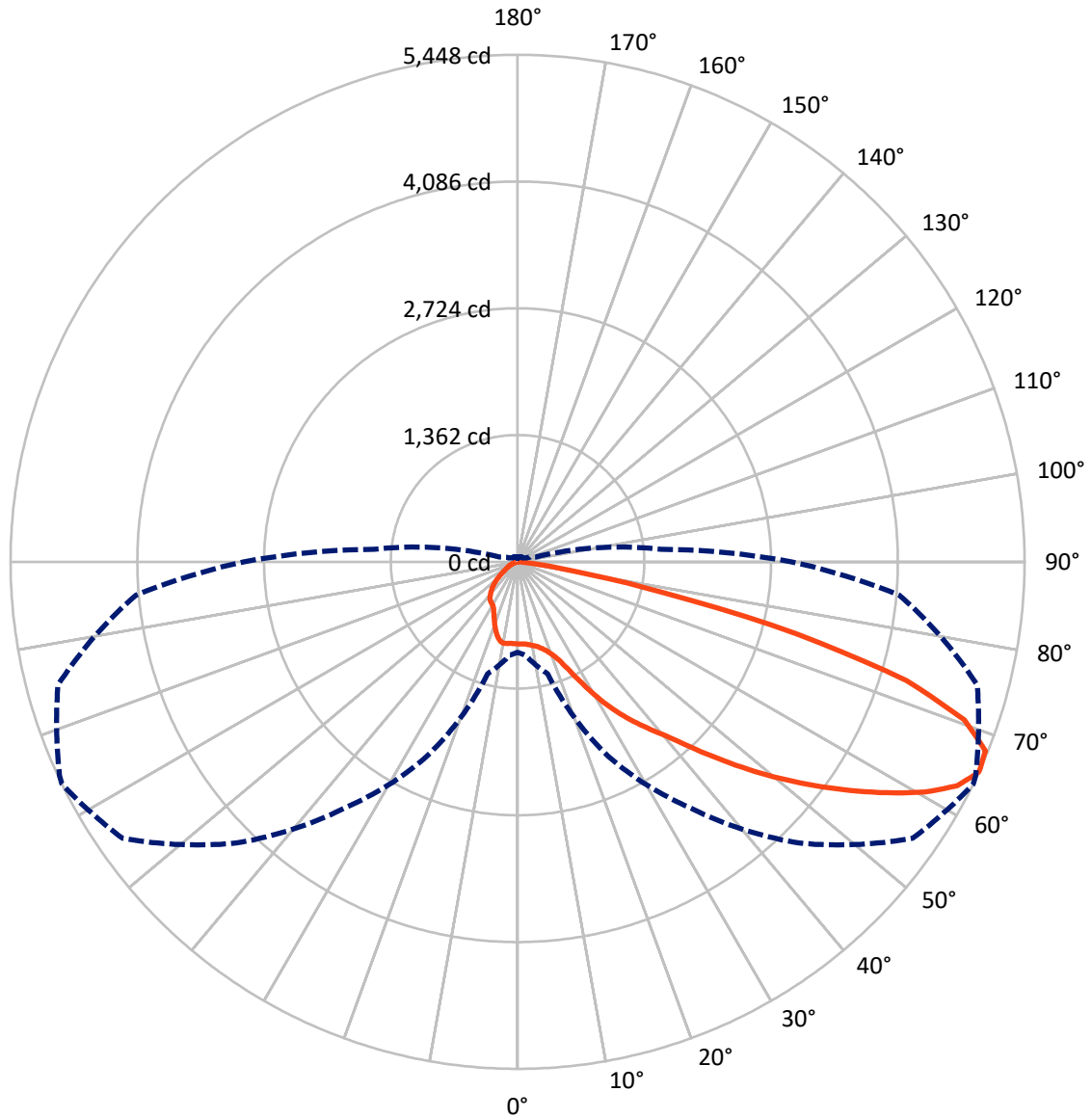
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1015.0	0.0	1015.0
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	6575.1	0.0	6575.1
	% Fixture	86.6	0.0	86.6
Total	Lumens	7590.1	0.0	7590.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	1.1
10°-20°	220.9	2.9
20°-30°	418.6	5.5
30°-40°	847.1	11.2
40°-50°	1443.0	19.0
50°-60°	1962.3	25.9
60°-70°	1842.7	24.3
70°-80°	738.3	9.7
80°-90°	35.8	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°	7590.1	100.0
0°-180°	7590.1	100.0

Coefficient of Utilization



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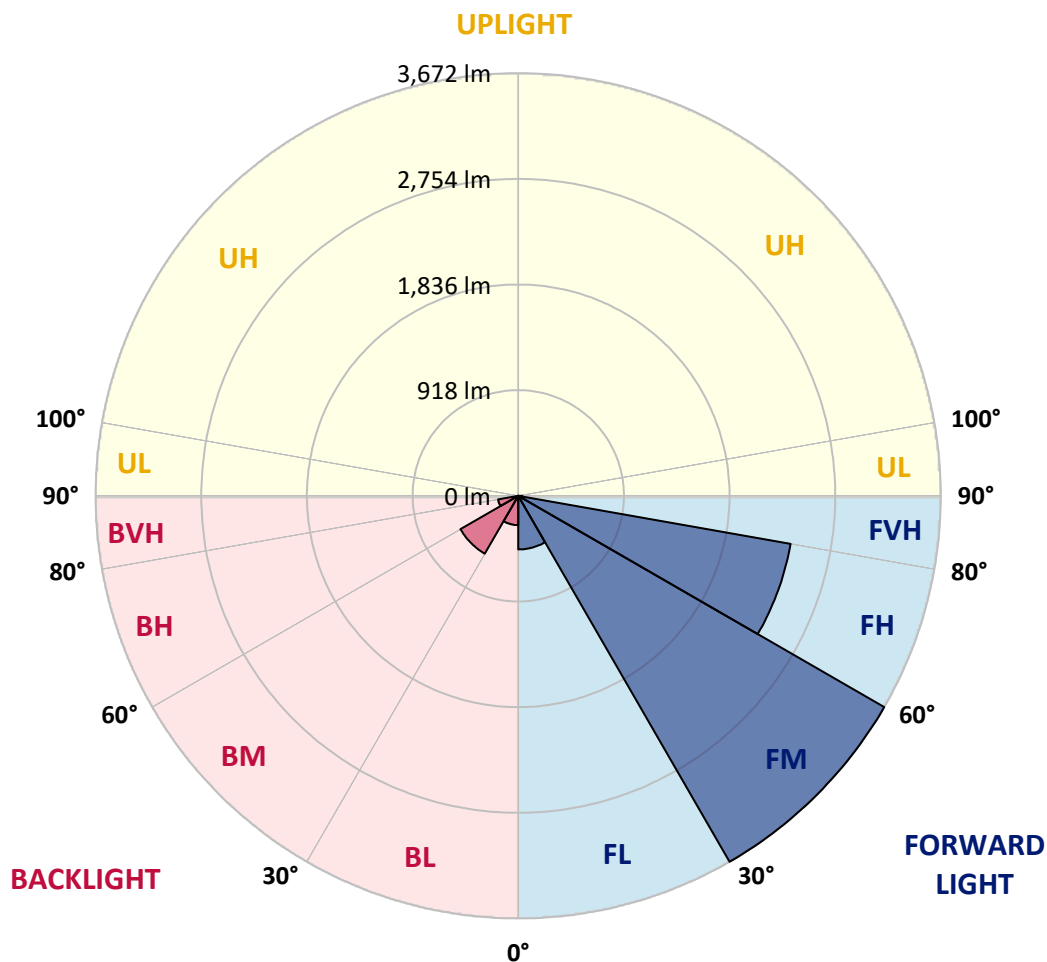
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	466.1	6.1			
FM (30°-60°)	3672.1	48.4			
FH (60°-80°)	2402.9	31.7			G2/5000
FVH (80°-90°)	34.0	0.4			G1/100
BL (0°-30°)	254.8	3.4	B1/500		
BM (30°-60°)	580.3	7.6	B1/1000		
BH (60°-80°)	178.2	2.3	B1/500		G1/500
BVH (80°-90°)	1.7	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-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	882.8	882.8	882.8	882.8	882.8	882.8	882.8	882.8	882.8	882.8	882.8
2.5°	879.8	885.9	884.4	882.8	882.3	883.3	883.9	883.3	883.3	883.3	883.9
5°	862.9	868.1	868.1	871.7	876.7	882.8	887.3	888.4	889.4	890.9	890.4
7.5°	830.9	835.0	838.0	849.7	862.4	878.7	892.5	899.6	900.7	906.2	908.3
10°	809.0	814.2	819.2	831.4	849.7	874.1	897.6	914.9	917.4	930.6	936.7
12.5°	808.0	813.1	819.7	832.9	854.3	880.3	908.8	933.7	938.3	957.7	970.4
15°	818.7	824.8	830.9	847.2	870.1	901.6	932.1	963.2	967.8	995.3	1009.0
17.5°	840.6	848.7	853.3	869.6	894.0	929.2	969.3	1004.9	1009.0	1041.1	1058.3
20°	883.9	893.5	895.0	908.3	932.1	969.9	1017.6	1061.9	1067.0	1103.6	1123.0
22.5°	973.3	987.1	974.9	981.5	1002.9	1040.6	1092.4	1148.4	1155.6	1197.3	1214.5
25°	1131.1	1150.5	1118.9	1107.7	1116.8	1156.1	1221.2	1291.9	1300.0	1333.6	1342.2
27.5°	1440.9	1416.0	1368.3	1321.4	1294.0	1316.3	1389.6	1477.1	1487.3	1519.9	1509.7
30°	1781.3	1759.5	1694.9	1591.1	1525.9	1522.4	1590.1	1687.8	1699.4	1730.5	1699.4
32.5°	2122.3	2101.5	2031.2	1903.5	1790.6	1734.6	1781.3	1889.8	1895.8	1915.7	1869.9
35°	2457.6	2436.2	2366.0	2235.2	2096.3	1969.1	1960.0	2082.1	2084.1	2105.0	2036.8
37.5°	2795.0	2777.1	2702.4	2574.2	2437.2	2261.8	2176.8	2264.2	2266.8	2287.2	2216.5
40°	3035.6	3043.3	2991.9	2892.7	2775.1	2583.3	2419.9	2458.2	2442.9	2476.9	2434.7
42.5°	3242.3	3257.4	3212.8	3162.8	3094.7	2925.8	2721.2	2714.6	2690.1	2708.5	2664.7
45°	3420.8	3433.5	3393.4	3381.7	3380.1	3261.5	3050.4	3010.7	2976.6	2973.0	2920.6
47.5°	3486.4	3510.9	3528.2	3567.4	3643.7	3593.9	3390.8	3329.2	3291.1	3263.1	3180.2
50°	3511.4	3537.4	3596.4	3710.4	3891.0	3912.3	3729.7	3660.5	3613.6	3562.8	3440.7
52.5°	3477.8	3524.2	3603.5	3795.4	4057.4	4167.8	4054.8	3994.3	3940.8	3857.9	3676.8
55°	3279.9	3326.2	3488.5	3794.3	4140.3	4346.9	4362.2	4335.1	4275.2	4144.4	3867.5
57.5°	2862.6	2931.3	3188.3	3665.1	4138.7	4501.1	4663.3	4682.7	4615.6	4428.3	4017.7
60°	2284.6	2377.7	2691.1	3378.6	4011.0	4584.5	4927.5	5024.1	4952.9	4708.1	4139.3
62.5°	1594.2	1702.0	1998.6	2929.9	3719.0	4524.5	5120.3	5298.9	5244.9	4958.5	4186.1
65°	972.3	1007.0	1246.1	2305.5	3222.4	4273.1	5179.8	5447.5	5429.6	5111.7	4116.9
67.5°	647.7	676.7	745.4	1581.0	2501.4	3770.9	5037.4	5421.5	5426.7	5086.8	3863.5
70°	390.2	415.2	460.0	919.4	1621.1	2984.8	4596.2	5090.8	5120.3	4753.4	3383.2
72.5°	160.8	177.5	218.3	416.8	839.6	1894.3	3660.0	4370.8	4439.5	3996.8	2596.5
75°	91.1	99.7	128.2	209.1	364.3	882.8	2217.0	3102.8	3204.0	2754.8	1562.1
77.5°	60.6	64.6	82.9	135.3	205.1	301.2	947.4	1616.5	1809.8	1504.6	676.2
80°	40.7	44.3	57.0	90.6	133.4	129.3	301.8	598.9	736.8	517.0	164.8
82.5°	27.5	28.0	40.7	59.6	84.5	62.6	89.1	186.2	234.1	149.5	62.6
85°	15.8	15.3	30.0	34.6	37.6	25.9	27.0	56.0	73.3	63.1	35.6
87.5°	2.0	3.1	11.7	9.1	5.1	5.6	5.6	9.6	14.2	15.3	7.6
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°	882.8	882.8	882.8	882.8	882.8	882.8	882.8	882.8	882.8	882.8	882.8
2.5°	883.9	883.3	881.8	880.3	876.7	874.6	875.7	874.6	874.1	874.6	876.7
5°	890.4	888.9	884.9	879.8	872.7	864.0	858.4	850.2	842.7	838.0	839.1
7.5°	908.3	906.7	901.1	886.8	864.0	827.9	794.8	765.8	743.9	731.1	731.6
10°	936.7	934.2	925.6	894.0	833.9	755.1	689.4	635.0	599.4	582.6	581.1
12.5°	970.4	967.3	952.0	887.3	776.9	653.8	563.2	502.8	469.7	454.9	453.4
15°	1010.0	1005.9	975.9	855.9	694.0	541.9	459.0	413.7	392.3	379.0	379.6
17.5°	1059.3	1052.3	993.7	808.5	603.9	456.4	394.8	360.8	341.9	329.2	328.2
20°	1123.5	1111.8	1008.0	752.0	521.0	402.5	351.6	323.1	308.8	297.7	295.6
22.5°	1213.1	1196.3	1025.3	691.0	462.5	365.3	319.5	298.7	287.0	274.3	272.2
25°	1324.0	1304.1	1046.6	634.5	422.3	333.3	296.1	278.8	265.1	250.3	248.8
27.5°	1479.2	1443.5	1072.0	588.2	387.8	305.8	274.8	255.4	239.6	227.4	224.9
30°	1652.2	1593.7	1094.5	560.3	356.2	280.3	246.8	227.4	212.7	204.1	202.5
32.5°	1816.0	1736.7	1109.3	548.0	327.7	251.3	216.3	195.4	184.2	181.6	183.2
35°	1970.7	1865.9	1107.7	536.3	302.3	222.3	186.2	164.8	156.2	157.7	157.7
37.5°	2148.8	2003.8	1097.1	517.9	281.4	195.9	160.3	141.4	133.9	134.4	136.3
40°	2355.9	2163.1	1090.4	483.4	258.5	171.5	138.9	123.6	118.1	116.0	115.5
42.5°	2576.6	2317.2	1091.4	444.2	230.0	149.5	124.1	111.4	106.4	104.9	104.3
45°	2798.6	2464.2	1093.0	403.5	200.0	132.8	113.5	102.8	99.7	97.7	97.7
47.5°	3007.1	2589.5	1064.5	359.8	170.5	120.1	104.9	97.7	95.1	92.6	92.6
50°	3201.5	2672.9	995.8	308.8	147.1	109.9	98.2	93.1	90.6	88.0	88.0
52.5°	3352.7	2686.1	882.3	256.5	130.8	102.3	94.1	89.6	86.5	83.9	83.4
55°	3419.8	2603.2	721.0	207.6	118.1	95.6	90.1	85.5	81.9	79.3	78.8
57.5°	3402.5	2428.6	562.2	166.9	105.9	89.1	85.0	81.9	77.9	73.8	73.3
60°	3317.5	2195.0	423.8	138.9	94.6	81.9	79.3	76.9	71.2	65.1	64.1
62.5°	3170.5	1901.5	302.3	115.0	82.4	73.8	72.8	70.7	62.6	51.4	50.3
65°	2945.5	1544.8	203.6	95.6	70.7	64.6	65.1	61.6	50.8	38.1	37.1
67.5°	2616.9	1129.6	130.3	78.3	59.0	53.9	54.4	52.4	43.3	32.6	31.1
70°	2198.1	747.9	85.0	59.6	47.4	41.7	44.8	45.3	36.6	26.4	25.4
72.5°	1611.4	441.7	59.6	44.3	34.6	29.0	36.6	37.6	29.5	19.9	18.9
75°	918.4	209.6	44.8	32.1	21.3	20.4	28.5	28.5	20.4	13.2	12.2
77.5°	385.7	87.5	31.6	20.9	12.2	11.7	19.4	17.8	10.1	6.1	6.1
80°	111.4	39.2	16.8	10.1	5.1	4.6	7.6	5.6	2.6	1.0	1.0
82.5°	43.8	17.3	6.7	4.1	2.0	2.0	1.0	0.0	0.0	0.0	0.0
85°	25.9	7.1	3.1	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.7	1.5	1.0	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)