

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: P959763

Luminaire Tested: **NAV-SB1B-727-U-T2R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959763  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1B-727-U-T2R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

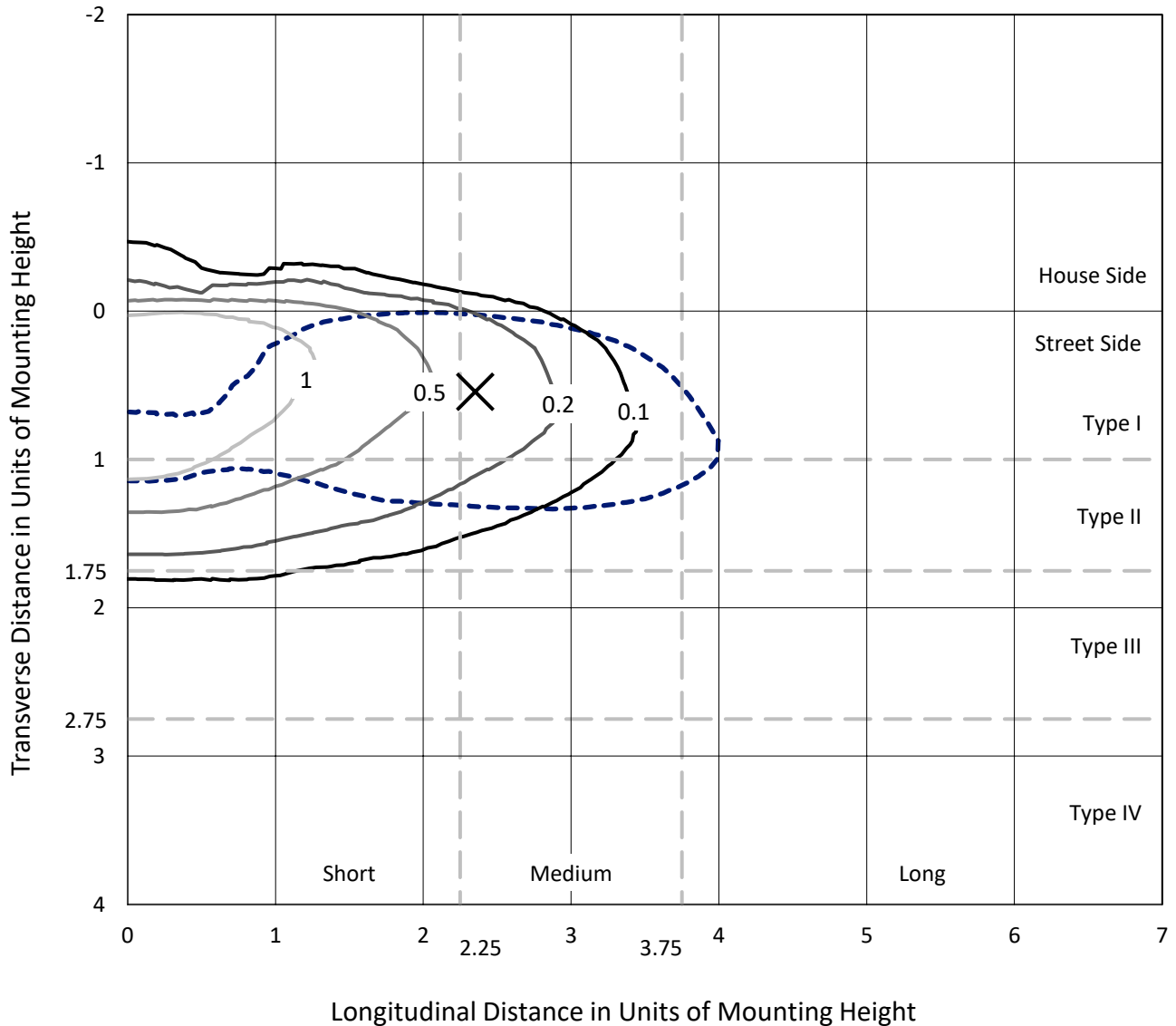
Lumens per Lamp: N/A  
Luminaire Lumens: 4534.6 lumens  
Efficiency: N/A  
Efficacy: 113.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 39.8  
Input Voltage (V): NR  
Input Current (Ain): 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

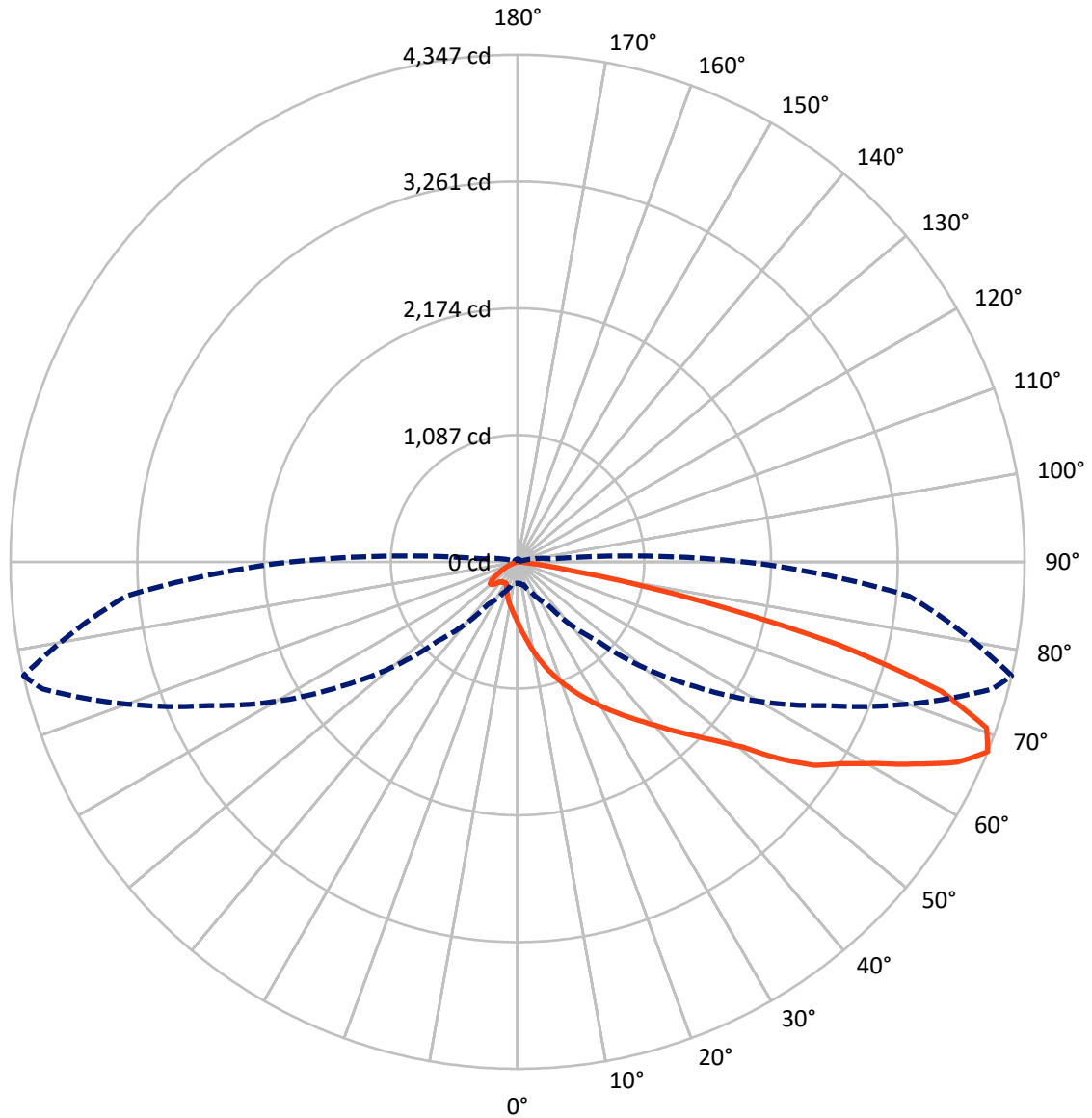
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	333.6	0.0	333.6
	% Fixture	7.4	0.0	7.4
<b>Street Side</b>	Lumens	4201.0	0.0	4201.0
	% Fixture	92.6	0.0	92.6
<b>Total</b>	Lumens	4534.6	0.0	4534.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.4	1.2
10°-20°	186.9	4.1
20°-30°	360.7	8.0
30°-40°	626.1	13.8
40°-50°	909.1	20.0
50°-60°	1044.0	23.0
60°-70°	906.4	20.0
70°-80°	426.9	9.4
80°-90°	21.1	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°	4534.6	100.0
0°-180°	4534.6	100.0

**Coefficient of Utilization**

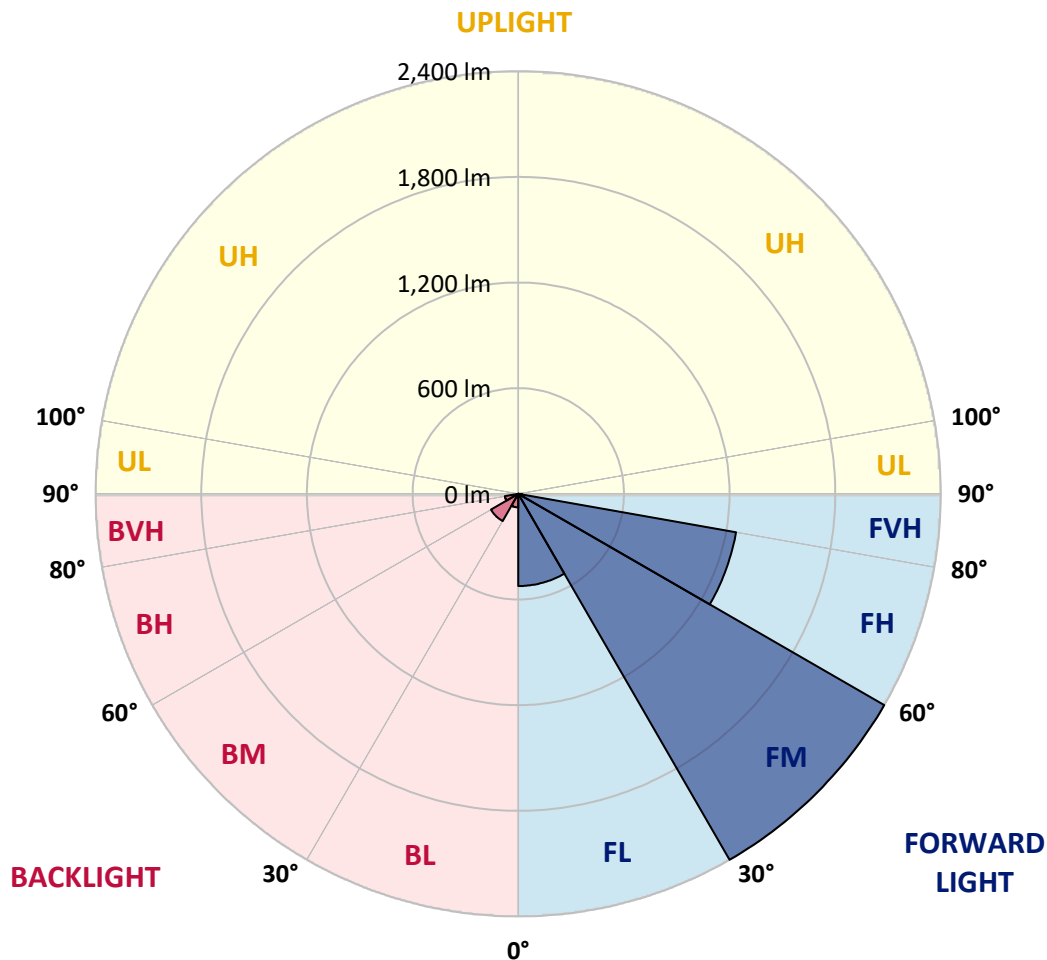


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	523.7	11.5			
FM (30°-60°)	2400.5	52.9			
FH (60°-80°)	1256.1	27.7			G1/1800
FVH (80°-90°)	20.7	0.5			G1/100
BL (0°-30°)	77.2	1.7	B0/110		
BM (30°-60°)	178.8	3.9	B0/220		
BH (60°-80°)	77.2	1.7	B0/110		G0/110
BVH (80°-90°)	0.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**  
 Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0
2.5°	724.0	728.5	722.0	709.6	691.1	678.9	649.3	621.5	590.5	580.7	549.7
5°	882.5	886.4	879.1	865.6	840.8	817.1	778.3	720.1	659.5	640.0	585.2
7.5°	999.9	1002.1	999.4	987.0	963.3	936.5	893.2	824.2	734.4	713.0	628.7
10°	1084.3	1091.7	1090.9	1086.1	1070.3	1048.7	1002.4	923.9	818.3	790.7	678.0
12.5°	1140.4	1148.6	1153.3	1164.1	1163.3	1149.4	1108.8	1025.8	901.9	869.5	733.5
15°	1156.7	1165.5	1183.8	1208.6	1230.5	1237.6	1209.1	1125.8	994.0	952.6	790.4
17.5°	1147.5	1161.0	1183.0	1222.1	1270.3	1302.1	1299.0	1222.4	1077.6	1030.3	846.1
20°	1168.0	1181.0	1198.1	1231.1	1287.1	1344.9	1368.0	1314.8	1160.7	1111.1	904.8
22.5°	1281.8	1279.5	1281.2	1286.6	1320.1	1377.2	1424.9	1398.6	1242.9	1192.3	966.7
25°	1462.0	1451.8	1434.7	1405.7	1397.3	1424.9	1474.4	1473.0	1329.6	1275.3	1030.0
27.5°	1668.7	1667.0	1626.7	1556.9	1517.5	1506.7	1530.4	1545.4	1415.5	1357.5	1093.7
30°	1866.6	1871.1	1816.8	1739.1	1666.8	1624.7	1603.3	1614.1	1502.9	1446.3	1159.3
32.5°	2038.9	2043.7	1984.6	1893.7	1804.1	1753.5	1708.4	1681.9	1598.0	1536.4	1231.3
35°	2184.6	2189.3	2121.4	2021.0	1925.5	1879.5	1828.6	1756.2	1693.7	1636.3	1311.6
37.5°	2314.7	2313.2	2222.3	2120.9	2027.1	1990.9	1964.1	1847.8	1792.3	1736.9	1400.6
40°	2391.5	2397.5	2319.7	2208.0	2116.9	2090.5	2088.8	1961.2	1906.1	1852.3	1498.0
42.5°	2414.1	2424.4	2368.2	2276.3	2193.8	2165.1	2209.3	2084.0	2038.4	1986.0	1608.1
45°	2373.5	2383.6	2358.0	2294.4	2246.2	2227.6	2312.9	2211.3	2179.8	2127.9	1732.4
47.5°	2255.2	2267.9	2274.1	2260.5	2260.0	2278.9	2405.9	2345.3	2347.6	2294.7	1876.2
50°	2026.3	2047.7	2104.5	2152.4	2226.5	2319.5	2496.3	2490.6	2536.8	2491.2	2063.7
52.5°	1610.1	1640.5	1836.5	1967.5	2133.8	2311.8	2595.7	2723.8	2868.8	2802.0	2328.2
55°	1293.9	1293.9	1453.2	1698.2	1953.0	2261.7	2639.1	2875.3	3094.9	3079.1	2514.3
57.5°	1054.8	1067.5	1169.1	1385.7	1691.5	2142.4	2665.8	2970.4	3277.1	3265.5	2696.2
60°	651.0	678.3	870.4	1084.1	1393.9	1929.7	2648.9	3066.8	3498.1	3507.4	2915.3
62.5°	366.6	376.8	462.4	780.0	1083.8	1643.9	2519.7	3120.5	3780.8	3820.3	3141.1
65°	253.2	258.2	291.2	485.4	751.2	1308.8	2267.1	3087.0	4064.1	4143.9	3332.6
67.5°	183.9	186.4	206.9	296.5	445.8	948.9	1871.1	2918.1	4214.2	4347.4	3369.2
70°	141.3	143.1	158.0	194.9	263.3	585.7	1358.9	2582.2	4105.5	4264.6	3181.6
72.5°	114.9	116.5	128.1	144.2	174.6	346.3	823.7	2096.9	3625.7	3797.5	2708.6
75°	96.9	99.1	109.6	119.9	136.8	222.4	386.3	1460.3	2726.6	2839.2	1883.5
77.5°	53.8	49.6	89.0	99.4	115.4	140.8	180.8	859.4	1527.0	1558.3	835.8
80°	33.5	34.6	70.7	79.9	88.7	70.9	82.8	330.9	529.4	502.9	162.0
82.5°	1.9	4.5	54.3	57.7	60.8	30.4	31.3	112.3	127.5	117.2	28.7
85°	0.0	0.0	24.8	20.0	21.1	8.7	9.0	26.1	17.2	18.6	5.6
87.5°	0.0	0.0	0.0	0.5	0.0	0.8	1.6	2.3	0.8	1.1	1.9
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°	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0
2.5°	529.9	510.2	470.3	431.1	399.3	369.7	348.6	328.6	318.5	318.0	317.3
5°	546.0	504.6	424.7	353.9	297.0	251.4	221.9	200.8	190.0	186.4	185.8
7.5°	568.6	506.2	384.7	286.4	219.4	180.2	163.3	156.5	154.3	151.8	151.2
10°	597.0	510.2	348.9	230.6	172.9	153.1	146.5	143.6	142.0	140.2	139.7
12.5°	628.7	513.9	313.4	191.5	152.0	142.0	137.1	133.8	131.5	129.6	128.9
15°	659.8	516.2	276.5	164.2	141.3	133.1	128.1	124.4	121.4	119.1	118.8
17.5°	690.4	519.3	241.9	147.8	132.6	124.4	119.4	114.9	112.3	109.8	109.6
20°	724.6	518.6	209.2	136.3	123.9	115.7	110.4	106.2	103.6	100.8	100.6
22.5°	756.0	515.9	180.5	126.4	114.9	107.0	101.1	96.9	94.3	92.0	91.8
25°	792.4	513.6	156.5	117.5	106.4	98.6	92.0	88.1	85.3	83.3	83.0
27.5°	827.3	510.2	139.1	109.3	98.3	90.7	84.5	79.9	77.4	76.1	76.1
30°	861.6	509.4	132.6	101.4	90.9	83.3	77.2	73.0	70.9	70.4	70.1
32.5°	903.0	511.7	135.4	98.6	84.2	76.6	70.7	67.5	65.6	65.6	65.6
35°	947.3	511.1	139.7	101.1	79.6	69.8	65.3	63.3	61.4	61.4	61.4
37.5°	1002.8	511.9	143.1	105.3	78.0	64.2	61.7	59.1	58.0	58.0	58.0
40°	1085.5	539.8	141.3	109.0	77.4	60.3	55.1	54.3	53.5	53.5	53.5
42.5°	1186.8	600.3	143.6	109.3	77.2	57.4	50.6	52.4	50.4	50.1	49.8
45°	1297.9	666.6	158.0	103.3	76.9	56.1	48.5	50.4	47.4	47.4	47.4
47.5°	1407.9	732.2	172.6	94.9	76.1	55.8	46.4	45.3	44.5	44.8	44.8
50°	1559.7	785.7	178.2	83.3	74.1	55.1	42.8	43.0	42.5	43.0	43.0
52.5°	1725.0	796.9	171.5	70.4	68.5	53.5	40.3	41.4	41.1	41.7	41.7
55°	1828.1	784.7	141.7	58.5	59.7	46.7	37.7	40.0	40.0	40.0	40.0
57.5°	1934.5	733.3	100.6	47.6	49.6	38.3	35.5	38.5	38.3	38.0	38.0
60°	2011.0	650.0	66.2	39.2	39.5	31.6	32.9	36.3	36.1	34.6	34.6
62.5°	2068.2	557.8	42.5	33.2	30.1	28.4	30.1	32.9	31.8	28.7	28.2
65°	2061.8	430.3	32.7	28.4	24.8	24.8	26.1	28.7	25.3	20.3	19.7
67.5°	1941.6	291.2	27.1	24.0	20.8	20.6	21.7	24.0	21.7	17.2	16.6
70°	1726.7	190.3	21.7	18.6	16.6	15.2	17.4	20.6	18.3	13.8	13.2
72.5°	1401.5	116.0	16.3	13.5	12.1	9.8	13.8	16.9	14.7	10.1	9.5
75°	906.7	59.1	11.3	8.7	6.5	5.9	10.1	12.7	10.1	6.1	5.3
77.5°	347.0	24.8	6.1	3.9	3.4	2.8	5.6	7.6	4.2	1.4	1.1
80°	66.7	10.5	3.1	1.9	1.6	1.1	0.8	0.5	0.0	0.0	0.0
82.5°	11.6	3.4	1.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.4	0.0	0.0	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)