

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: P959236

Luminaire Tested: **NAV-SB1A-727-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959236
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-SB1A-727-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA 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: 3612.1 lumens
Efficiency: N/A
Efficacy: 116.9 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

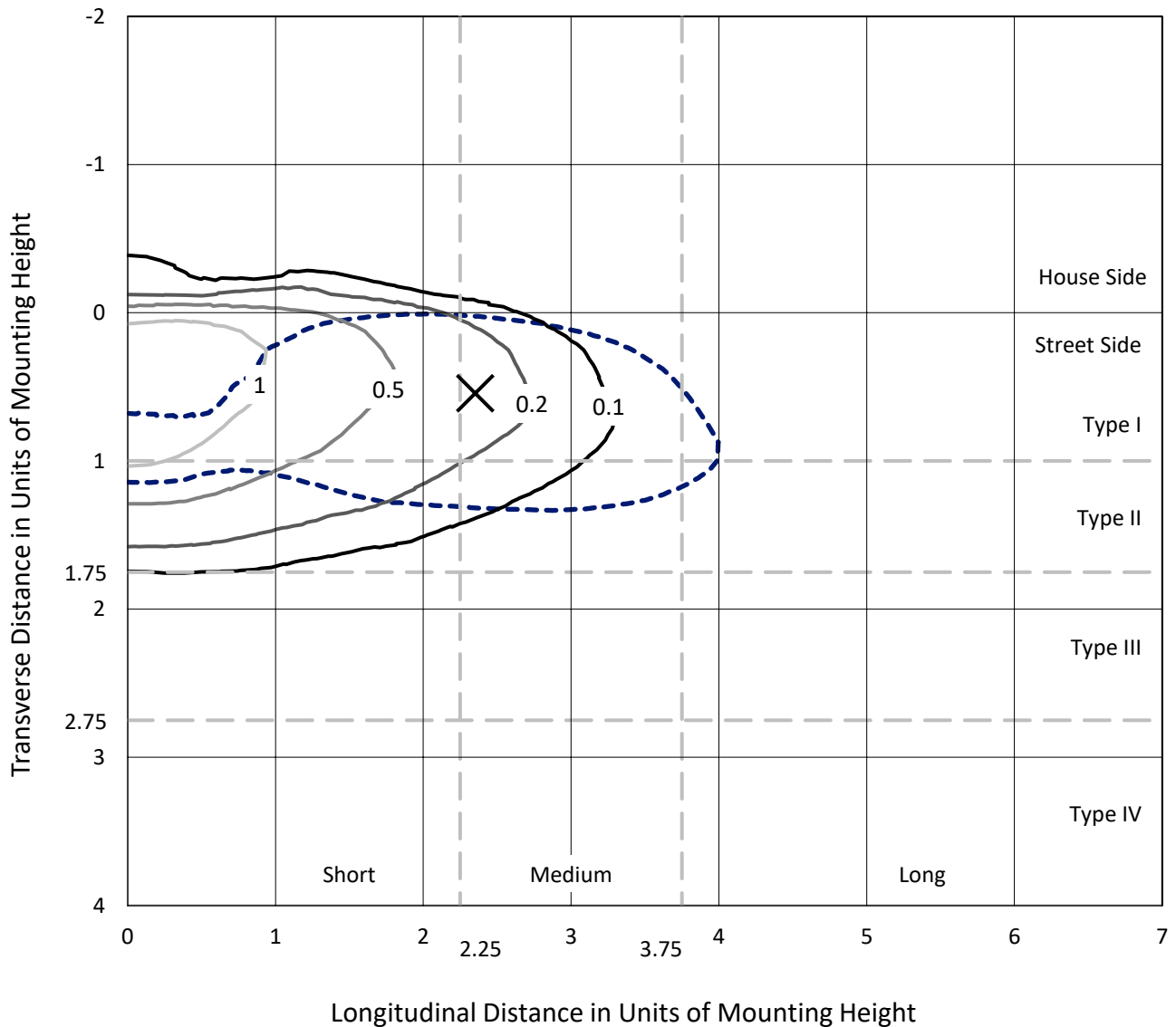
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

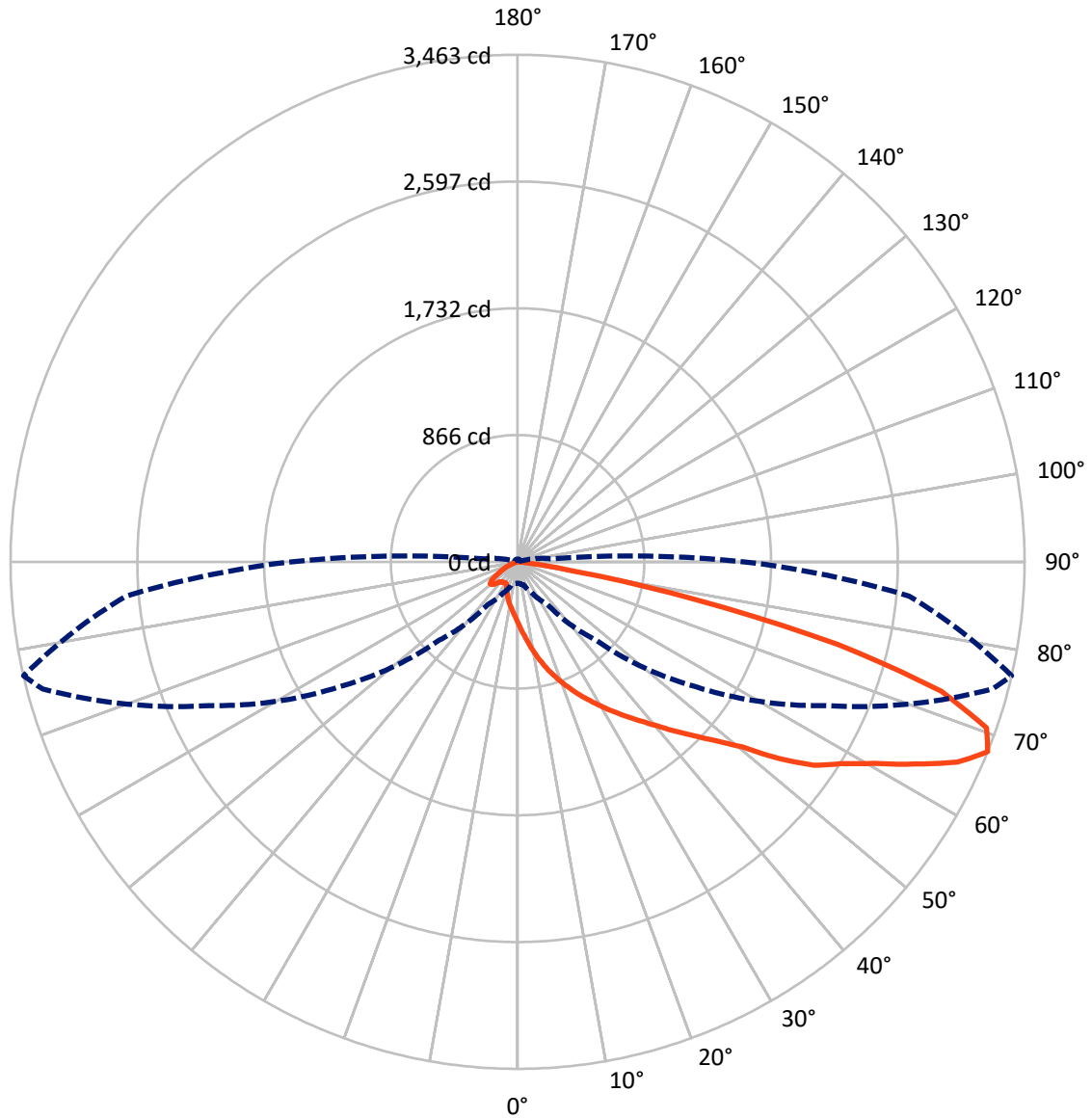
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 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
House Side	Lumens	265.7	0.0	265.7
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	3346.4	0.0	3346.4
	% Fixture	92.6	0.0	92.6
Total	Lumens	3612.1	0.0	3612.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.5	1.2
10°-20°	148.9	4.1
20°-30°	287.3	8.0
30°-40°	498.8	13.8
40°-50°	724.2	20.0
50°-60°	831.6	23.0
60°-70°	722.0	20.0
70°-80°	340.1	9.4
80°-90°	16.8	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°	3612.1	100.0
0°-180°	3612.1	100.0

Coefficient of Utilization

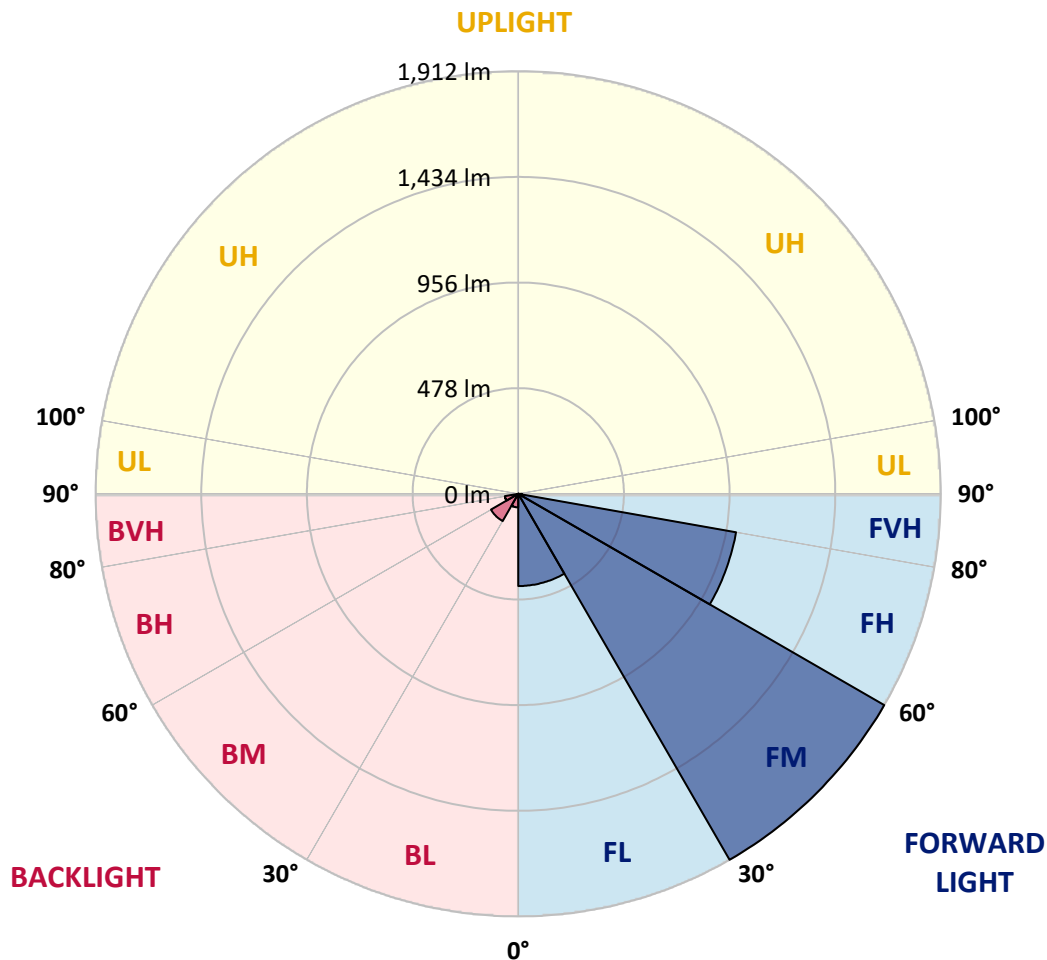


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	417.2	11.5			
FM (30°-60°)	1912.1	52.9			
FH (60°-80°)	1000.5	27.7			G1/1800
FVH (80°-90°)	16.5	0.5			G1/100
BL (0°-30°)	61.5	1.7	B0/110		
BM (30°-60°)	142.4	3.9	B0/220		
BH (60°-80°)	61.5	1.7	B0/110		G0/110
BVH (80°-90°)	0.3	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°	416.6	416.6	416.6	416.6	416.6	416.6	416.6	416.6	416.6	416.6	416.6
2.5°	576.7	580.3	575.1	565.3	550.4	540.8	517.2	495.1	470.4	462.5	437.9
5°	702.9	706.1	700.3	689.5	669.7	650.9	619.9	573.6	525.3	509.8	466.1
7.5°	796.5	798.3	796.0	786.2	767.3	746.0	711.5	656.5	585.0	568.0	500.8
10°	863.8	869.6	869.0	865.1	852.6	835.3	798.5	735.9	651.8	629.9	540.1
12.5°	908.5	914.9	918.7	927.2	926.6	915.6	883.3	817.1	718.4	692.6	584.4
15°	921.5	928.3	943.0	962.7	980.2	985.8	963.2	896.8	791.8	758.8	629.7
17.5°	914.0	924.8	942.3	973.4	1011.8	1037.2	1034.7	973.6	858.4	820.7	674.0
20°	930.4	940.7	954.4	980.6	1025.3	1071.2	1089.7	1047.2	924.6	885.1	720.7
22.5°	1021.0	1019.3	1020.6	1024.8	1051.5	1097.1	1135.0	1114.1	990.0	949.7	770.0
25°	1164.6	1156.5	1142.8	1119.7	1112.9	1135.0	1174.4	1173.3	1059.1	1015.9	820.5
27.5°	1329.2	1327.9	1295.8	1240.1	1208.8	1200.3	1219.0	1230.9	1127.6	1081.4	871.1
30°	1486.9	1490.5	1447.2	1385.3	1327.7	1294.3	1277.1	1285.7	1197.1	1152.0	923.4
32.5°	1624.2	1628.0	1580.9	1508.4	1437.0	1396.8	1360.8	1339.8	1272.9	1223.7	980.8
35°	1740.1	1743.9	1689.9	1609.8	1533.8	1497.2	1456.6	1398.9	1349.2	1303.4	1044.8
37.5°	1843.8	1842.6	1770.2	1689.4	1614.8	1585.8	1564.5	1471.9	1427.7	1383.4	1115.7
40°	1905.0	1909.7	1847.8	1758.8	1686.3	1665.2	1663.9	1562.3	1518.3	1475.5	1193.3
42.5°	1922.9	1931.2	1886.4	1813.2	1747.5	1724.7	1759.8	1660.1	1623.7	1582.0	1280.9
45°	1890.6	1898.7	1878.3	1827.6	1789.2	1774.5	1842.4	1761.5	1736.4	1695.0	1379.9
47.5°	1796.4	1806.6	1811.5	1800.7	1800.2	1815.3	1916.4	1868.2	1870.0	1827.9	1494.6
50°	1614.1	1631.1	1676.4	1714.5	1773.6	1847.6	1988.4	1984.0	2020.7	1984.4	1643.9
52.5°	1282.6	1306.8	1462.9	1567.2	1699.8	1841.5	2067.6	2169.7	2285.1	2232.0	1854.5
55°	1030.6	1030.6	1157.6	1352.8	1555.7	1801.5	2102.2	2290.4	2465.3	2452.7	2002.7
57.5°	840.2	850.3	931.3	1103.8	1347.4	1706.5	2123.5	2366.1	2610.5	2601.2	2147.7
60°	518.5	540.4	693.3	863.6	1110.3	1537.1	2110.0	2442.9	2786.5	2793.9	2322.2
62.5°	292.0	300.1	368.3	621.4	863.4	1309.4	2007.1	2485.7	3011.7	3043.1	2502.1
65°	201.6	205.7	232.0	386.7	598.4	1042.5	1805.8	2459.0	3237.4	3300.8	2654.6
67.5°	146.5	148.5	164.8	236.2	355.1	755.9	1490.5	2324.4	3356.9	3463.0	2683.8
70°	112.6	114.0	125.9	155.2	209.7	466.6	1082.5	2056.9	3270.4	3397.1	2534.4
72.5°	91.5	92.9	102.1	114.8	139.1	275.9	656.1	1670.3	2888.1	3025.0	2157.5
75°	77.2	78.9	87.2	95.5	109.1	177.2	307.7	1163.3	2171.9	2261.7	1500.4
77.5°	42.8	39.5	70.9	79.1	91.9	112.1	144.0	684.6	1216.4	1241.3	665.7
80°	26.6	27.6	56.3	63.7	70.6	56.5	65.9	263.5	421.7	400.6	128.9
82.5°	1.5	3.6	43.3	46.0	48.5	24.2	24.9	89.5	101.6	93.3	22.9
85°	0.0	0.0	19.8	15.9	16.8	7.0	7.2	20.9	13.6	14.8	4.5
87.5°	0.0	0.0	0.0	0.4	0.0	0.7	1.3	1.8	0.7	0.9	1.5
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°	416.6	416.6	416.6	416.6	416.6	416.6	416.6	416.6	416.6	416.6	416.6
2.5°	422.1	406.4	374.5	343.4	318.1	294.5	277.7	261.8	253.7	253.3	252.8
5°	434.9	401.9	338.2	282.0	236.7	200.3	176.7	159.9	151.4	148.5	148.0
7.5°	452.8	403.3	306.4	228.2	174.8	143.6	130.1	124.7	122.9	120.8	120.4
10°	475.5	406.4	277.9	183.7	137.8	122.0	116.6	114.4	113.1	111.7	111.2
12.5°	500.8	409.4	249.7	152.5	121.2	113.1	109.3	106.5	104.8	103.2	102.7
15°	525.5	411.1	220.3	130.8	112.6	106.1	102.1	99.1	96.7	94.9	94.6
17.5°	550.0	413.6	192.7	117.8	105.7	99.1	95.1	91.5	89.5	87.4	87.2
20°	577.2	413.2	166.7	108.5	98.7	92.1	87.9	84.6	82.5	80.3	80.1
22.5°	602.3	410.9	143.8	100.8	91.5	85.3	80.6	77.2	75.1	73.4	73.1
25°	631.2	409.1	124.7	93.6	84.8	78.5	73.4	70.2	68.0	66.4	66.2
27.5°	659.0	406.4	110.8	87.0	78.3	72.3	67.2	63.7	61.7	60.6	60.6
30°	686.3	405.8	105.7	80.8	72.5	66.4	61.5	58.1	56.5	56.1	55.9
32.5°	719.3	407.5	107.9	78.5	67.0	61.0	56.3	53.8	52.3	52.3	52.3
35°	754.5	407.1	111.2	80.6	63.4	55.7	52.1	50.4	48.9	48.9	48.9
37.5°	798.8	407.7	114.0	83.8	62.1	51.1	49.1	47.2	46.2	46.2	46.2
40°	864.7	430.0	112.6	86.8	61.7	48.0	44.0	43.3	42.6	42.6	42.6
42.5°	945.5	478.2	114.4	87.0	61.5	45.7	40.4	41.7	40.2	40.0	39.7
45°	1033.8	530.9	125.9	82.3	61.2	44.6	38.5	40.2	37.7	37.7	37.7
47.5°	1121.6	583.2	137.5	75.5	60.6	44.4	37.0	36.1	35.5	35.7	35.7
50°	1242.4	625.8	142.0	66.4	59.0	44.0	34.1	34.3	33.8	34.3	34.3
52.5°	1374.1	634.8	136.6	56.1	54.5	42.6	32.1	33.0	32.7	33.2	33.2
55°	1456.2	625.1	112.9	46.6	47.6	37.2	30.0	31.9	31.9	31.9	31.9
57.5°	1541.0	584.0	80.1	37.9	39.5	30.5	28.3	30.7	30.5	30.2	30.2
60°	1602.0	517.7	52.7	31.2	31.4	25.1	26.2	28.9	28.7	27.6	27.6
62.5°	1647.5	444.3	33.8	26.4	24.0	22.7	24.0	26.2	25.3	22.9	22.4
65°	1642.4	342.8	26.0	22.7	19.8	19.8	20.9	22.9	20.2	16.2	15.7
67.5°	1546.5	232.0	21.5	19.1	16.6	16.4	17.2	19.1	17.2	13.6	13.2
70°	1375.4	151.6	17.2	14.8	13.2	12.1	13.9	16.4	14.6	11.0	10.6
72.5°	1116.3	92.5	13.0	10.8	9.6	7.9	11.0	13.4	11.7	8.1	7.6
75°	722.2	47.2	9.0	7.0	5.1	4.7	8.1	10.0	8.1	4.9	4.3
77.5°	276.3	19.8	4.9	3.2	2.7	2.3	4.5	6.0	3.4	1.1	0.9
80°	53.2	8.3	2.5	1.5	1.3	0.9	0.7	0.4	0.0	0.0	0.0
82.5°	9.2	2.7	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	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)