

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: P883588

Luminaire Tested: **NAV-SB4A-730-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883588
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-730-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14035 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

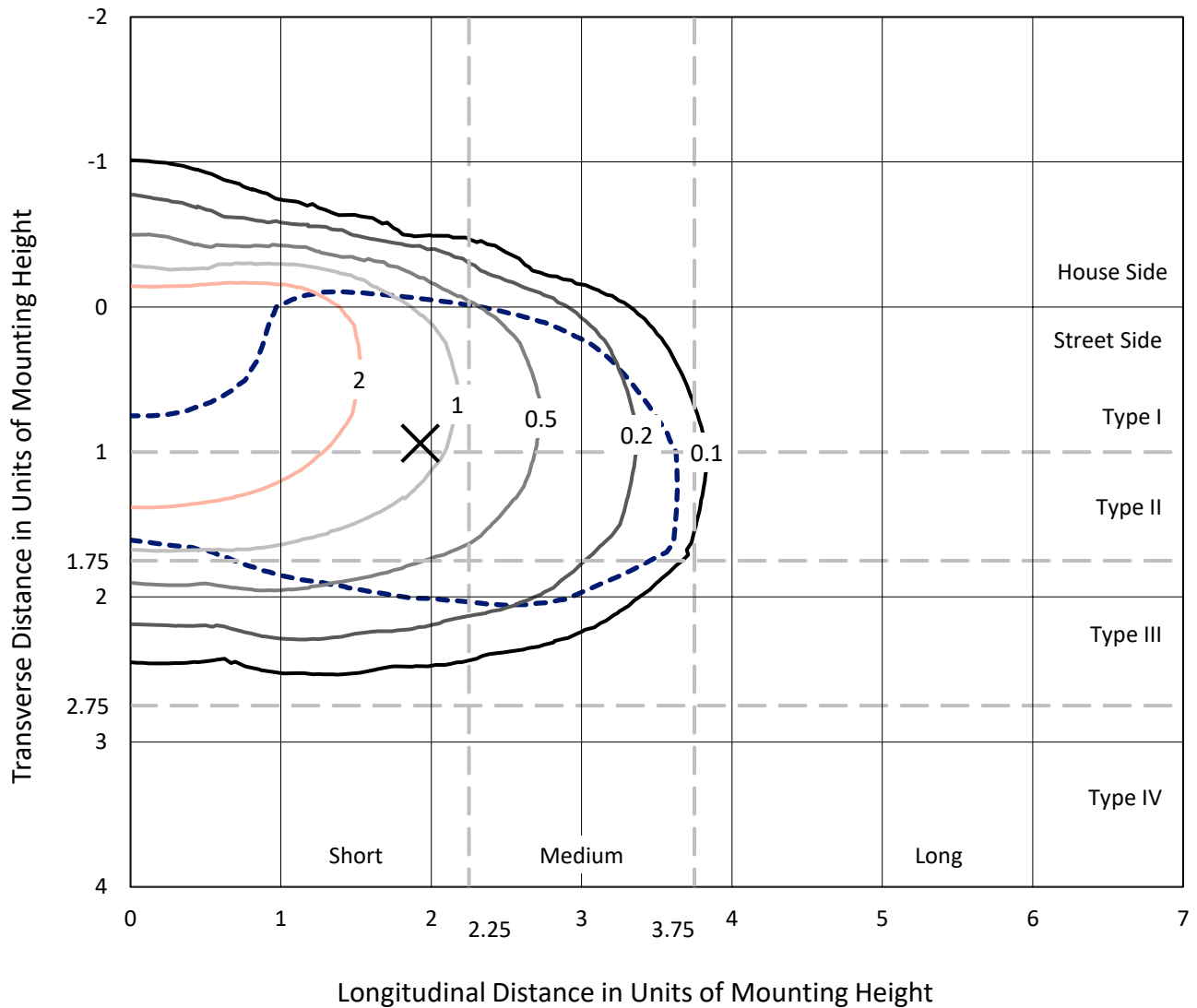
Input Watts (W): 114
Input Voltage (V): 120.0
Input Current (Ain): 0.952
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.206
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

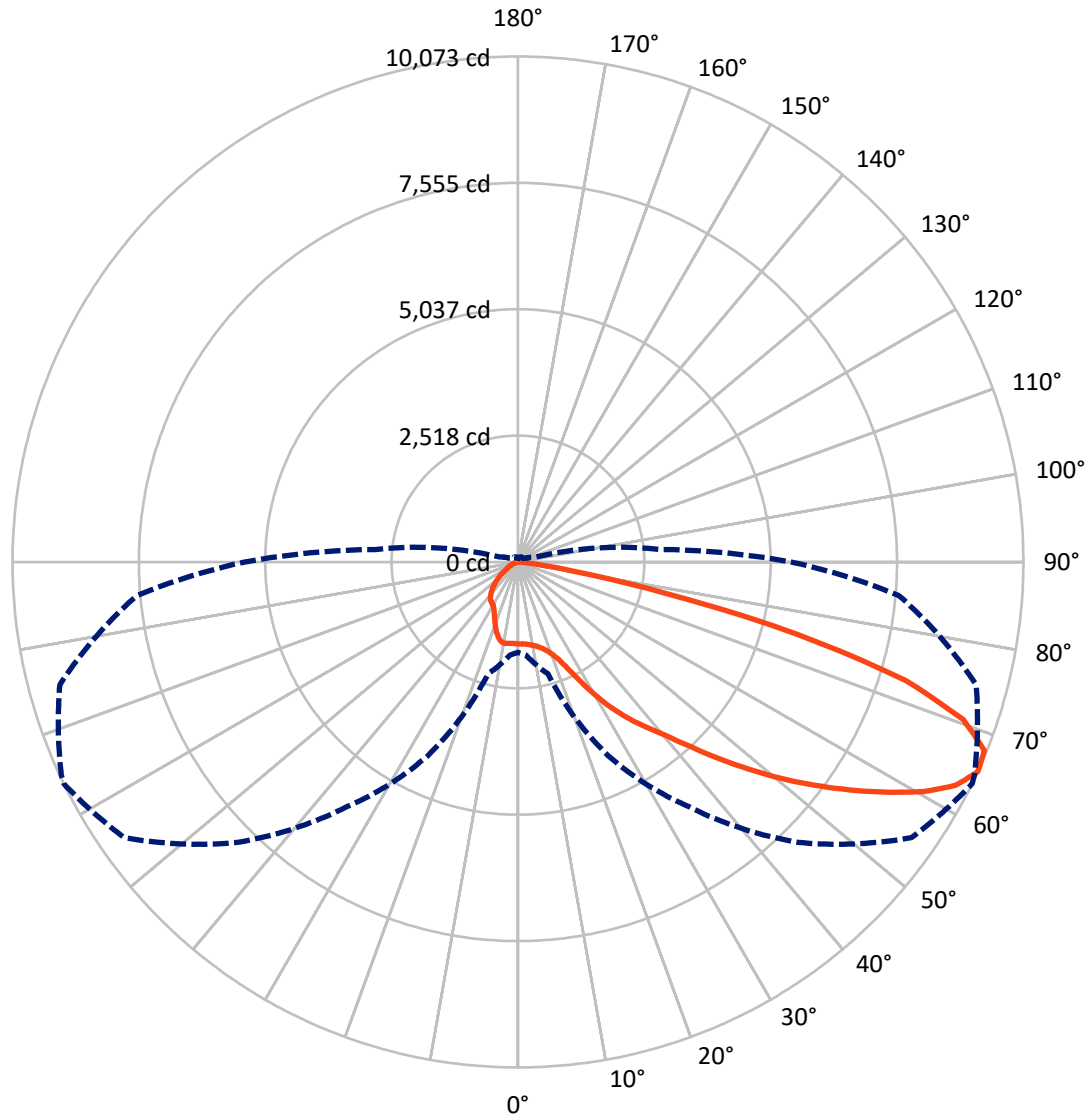
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 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	1876.9	0.0	1876.9
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	12158.1	0.0	12158.1
	% Fixture	86.6	0.0	86.6
Total	Lumens	14035.0	0.0	14035.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.6	1.1
10°-20°	408.5	2.9
20°-30°	774.1	5.5
30°-40°	1566.3	11.2
40°-50°	2668.2	19.0
50°-60°	3628.6	25.9
60°-70°	3407.4	24.3
70°-80°	1365.2	9.7
80°-90°	66.1	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°	14035.0	100.0
0°-180°	14035.0	100.0

Coefficient of Utilization



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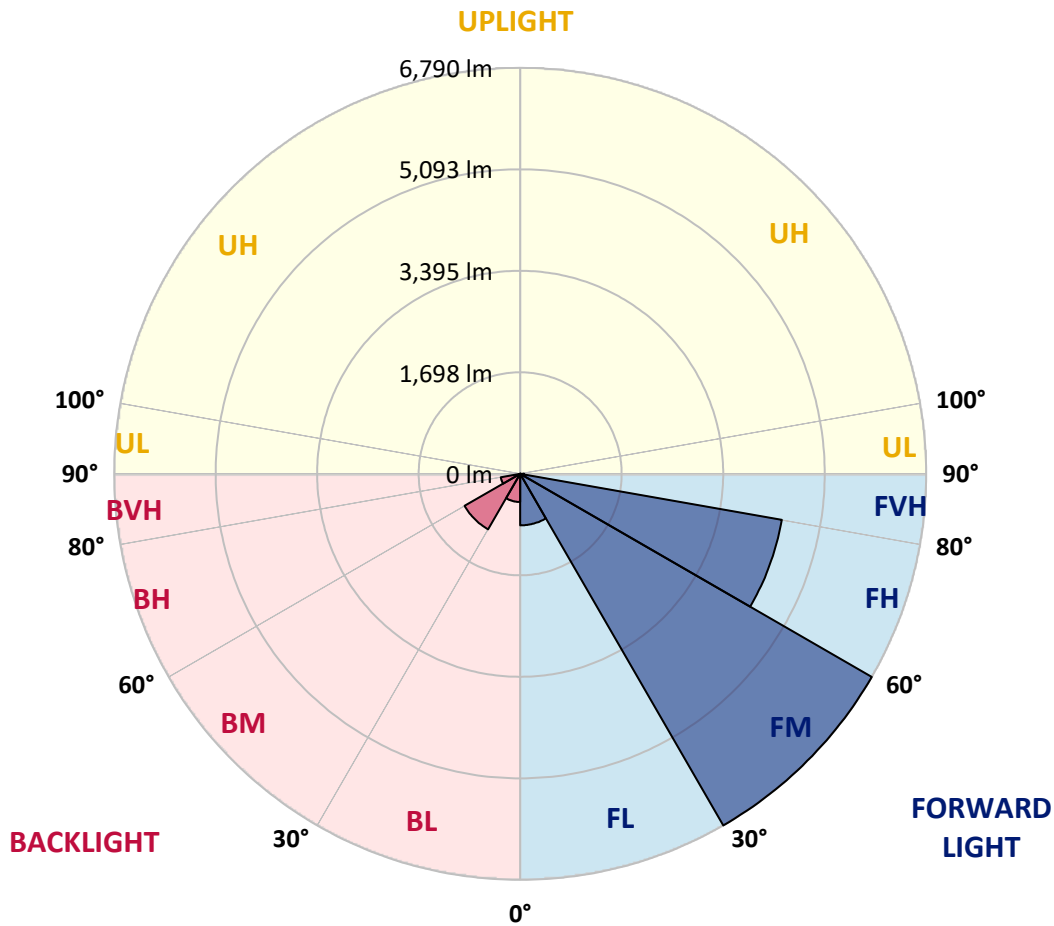
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	861.9	6.1			
FM (30°-60°)	6790.1	48.4			
FH (60°-80°)	4443.2	31.7			G2/5000
FVH (80°-90°)	62.9	0.4			G1/100
BL (0°-30°)	471.2	3.4	B1/500		
BM (30°-60°)	1073.0	7.6	B2/2500		
BH (60°-80°)	329.4	2.3	B1/500		G1/500
BVH (80°-90°)	3.2	0.0			G0/10
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°	64°	65°	75°	85°
0°	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4
2.5°	1626.8	1638.1	1635.2	1632.4	1631.5	1633.4	1634.3	1633.4	1633.4	1633.4	1634.3
5°	1595.7	1605.1	1605.1	1611.7	1621.1	1632.4	1640.9	1642.8	1644.6	1647.5	1646.5
7.5°	1536.4	1544.0	1549.6	1571.3	1594.8	1624.9	1650.3	1663.5	1665.3	1675.7	1679.5
10°	1496.0	1505.4	1514.8	1537.4	1571.3	1616.4	1659.7	1691.7	1696.4	1720.9	1732.1
12.5°	1494.1	1503.5	1515.7	1540.2	1579.7	1627.7	1680.4	1726.5	1735.0	1770.7	1794.2
15°	1513.9	1525.2	1536.4	1566.6	1608.9	1667.2	1723.7	1781.1	1789.5	1840.3	1865.8
17.5°	1554.3	1569.4	1577.8	1608.0	1653.1	1718.0	1792.4	1858.2	1865.8	1925.0	1957.0
20°	1634.3	1652.2	1655.0	1679.5	1723.7	1793.3	1881.7	1963.6	1973.0	2040.8	2076.5
22.5°	1799.9	1825.3	1802.7	1814.9	1854.5	1924.1	2020.1	2123.6	2136.7	2213.9	2245.9
25°	2091.6	2127.3	2069.0	2048.3	2065.2	2137.7	2258.1	2388.9	2403.9	2466.0	2482.0
27.5°	2664.6	2618.5	2530.0	2443.4	2392.6	2434.0	2569.5	2731.4	2750.2	2810.4	2791.6
30°	3294.0	3253.5	3134.1	2942.1	2821.7	2815.1	2940.2	3120.9	3142.5	3199.9	3142.5
32.5°	3924.4	3885.8	3756.0	3519.8	3310.9	3207.4	3294.0	3494.4	3505.7	3542.4	3457.7
35°	4544.4	4504.9	4375.1	4133.3	3876.4	3641.2	3624.2	3850.1	3853.8	3892.4	3766.3
37.5°	5168.2	5135.3	4997.0	4759.9	4506.8	4182.2	4025.1	4186.9	4191.6	4229.2	4098.4
40°	5613.3	5627.4	5532.3	5348.9	5131.5	4776.8	4474.8	4545.4	4517.1	4580.2	4502.1
42.5°	5995.2	6023.5	5940.7	5848.5	5722.4	5410.0	5031.8	5019.6	4974.4	5008.3	4927.4
45°	6325.5	6349.0	6274.7	6253.0	6250.2	6031.0	5640.5	5567.2	5504.1	5497.5	5400.6
47.5°	6446.9	6492.0	6524.0	6596.5	6737.6	6645.4	6270.0	6156.1	6085.6	6033.8	5880.5
50°	6493.0	6541.0	6650.1	6860.9	7194.9	7234.4	6896.6	6768.6	6682.1	6588.0	6362.2
52.5°	6430.9	6516.5	6663.3	7018.0	7502.5	7706.7	7497.8	7385.9	7287.1	7133.7	6798.8
55°	6064.9	6150.5	6450.6	7016.1	7655.9	8037.9	8066.1	8016.2	7905.2	7663.4	7151.6
57.5°	5293.4	5420.4	5895.5	6777.1	7653.1	8323.0	8623.1	8658.9	8534.7	8188.4	7429.1
60°	4224.5	4396.7	4976.3	6247.4	7416.9	8477.3	9111.4	9290.2	9158.5	8705.9	7654.0
62.5°	2947.8	3147.2	3695.8	5417.6	6876.8	8366.3	9468.0	9798.3	9698.5	9168.8	7740.6
65°	1798.0	1862.0	2304.2	4263.1	5958.6	7901.5	9578.1	10073.0	10040.1	9452.0	7612.6
67.5°	1197.7	1251.4	1378.4	2923.3	4625.3	6972.8	9314.7	10025.0	10034.4	9405.9	7144.1
70°	721.7	767.8	850.6	1700.2	2997.6	5519.2	8498.9	9413.4	9468.0	8789.6	6255.9
72.5°	297.3	328.4	403.6	770.6	1552.4	3502.9	6767.7	8082.1	8209.1	7390.6	4801.3
75°	168.4	184.4	237.1	386.7	673.7	1632.4	4099.4	5737.4	5924.7	5093.9	2888.5
77.5°	112.0	119.5	153.4	250.3	379.2	557.0	1751.9	2989.2	3346.7	2782.2	1250.4
80°	75.3	81.9	105.4	167.5	246.5	239.0	557.9	1107.4	1362.4	955.9	304.8
82.5°	50.8	51.7	75.3	110.1	156.2	115.7	164.7	344.4	432.8	276.6	115.7
85°	29.2	28.2	55.5	64.0	69.6	48.0	49.9	103.5	135.5	116.7	65.9
87.5°	3.8	5.6	21.6	16.9	9.4	10.3	10.3	17.9	26.3	28.2	14.1
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°	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4	1632.4
2.5°	1634.3	1633.4	1630.5	1627.7	1621.1	1617.4	1619.2	1617.4	1616.4	1617.4	1621.1
5°	1646.5	1643.7	1636.2	1626.8	1613.6	1597.6	1587.3	1572.2	1558.1	1549.6	1551.5
7.5°	1679.5	1676.6	1666.3	1639.9	1597.6	1530.8	1469.6	1416.0	1375.6	1352.0	1353.0
10°	1732.1	1727.4	1711.4	1653.1	1542.1	1396.3	1274.9	1174.2	1108.3	1077.3	1074.5
12.5°	1794.2	1788.6	1760.4	1640.9	1436.7	1209.0	1041.5	929.6	868.4	841.1	838.3
15°	1867.6	1860.1	1804.6	1582.5	1283.4	1002.0	848.7	764.9	725.4	701.0	701.9
17.5°	1958.9	1945.7	1837.5	1495.0	1116.8	844.0	730.1	667.1	632.3	608.7	606.9
20°	2077.4	2055.8	1863.9	1390.6	963.5	744.2	650.1	597.5	571.1	550.4	546.6
22.5°	2243.0	2212.0	1895.9	1277.7	855.3	675.5	590.9	552.3	530.7	507.1	503.4
25°	2448.2	2411.5	1935.4	1173.3	780.9	616.3	547.6	515.6	490.2	462.9	460.1
27.5°	2735.1	2669.3	1982.4	1087.7	716.9	565.5	508.1	472.3	443.2	420.6	415.9
30°	3055.0	2946.8	2023.8	1035.9	658.6	518.4	456.3	420.6	393.3	377.3	374.5
32.5°	3358.0	3211.2	2051.1	1013.3	605.9	464.8	399.9	361.3	340.6	335.9	338.7
35°	3644.0	3450.2	2048.3	991.7	558.9	411.2	344.4	304.8	288.8	291.7	291.7
37.5°	3973.3	3705.2	2028.5	957.8	520.3	362.2	296.4	261.6	247.4	248.4	252.2
40°	4356.2	3999.7	2016.3	893.8	478.0	317.1	256.9	228.6	218.3	214.5	213.6
42.5°	4764.6	4284.7	2018.2	821.4	425.3	276.6	229.6	206.1	196.6	193.8	192.9
45°	5174.8	4556.7	2021.0	746.1	369.8	245.6	209.8	190.1	184.4	180.6	180.6
47.5°	5560.6	4788.1	1968.3	665.2	315.2	222.0	193.8	180.6	175.9	171.2	171.2
50°	5920.0	4942.4	1841.3	571.1	271.9	203.2	181.6	172.2	167.5	162.8	162.8
52.5°	6199.4	4966.9	1631.5	474.2	241.8	189.1	174.1	165.6	159.9	155.2	154.3
55°	6323.6	4813.5	1333.2	383.9	218.3	176.9	166.5	158.1	151.5	146.8	145.8
57.5°	6291.6	4490.8	1039.7	308.6	195.7	164.7	157.1	151.5	144.0	136.4	135.5
60°	6134.5	4058.9	783.7	256.9	175.0	151.5	146.8	142.1	131.7	120.4	118.6
62.5°	5862.6	3516.0	558.9	212.6	152.4	136.4	134.5	130.8	115.7	95.0	93.1
65°	5446.7	2856.5	376.3	176.9	130.8	119.5	120.4	113.8	94.1	70.6	68.7
67.5°	4838.9	2088.7	240.9	144.9	109.1	99.7	100.7	96.9	80.0	60.2	57.4
70°	4064.6	1383.1	157.1	110.1	87.5	77.2	82.8	83.7	67.7	48.9	47.0
72.5°	2979.7	816.7	110.1	81.9	64.0	53.6	67.7	69.6	54.6	36.7	34.8
75°	1698.3	387.6	82.8	59.3	39.5	37.6	52.7	52.7	37.6	24.5	22.6
77.5°	713.2	161.8	58.3	38.6	22.6	21.6	35.8	32.9	18.8	11.3	11.3
80°	206.1	72.4	31.0	18.8	9.4	8.5	14.1	10.3	4.7	1.9	1.9
82.5°	80.9	32.0	12.2	7.5	3.8	3.8	1.9	0.0	0.0	0.0	0.0
85°	48.0	13.2	5.6	2.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.2	2.8	1.9	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)