

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: P882588

Luminaire Tested: **NAV-SB2C-740-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882588
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-SB2C-740-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 615mA 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: 12906 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

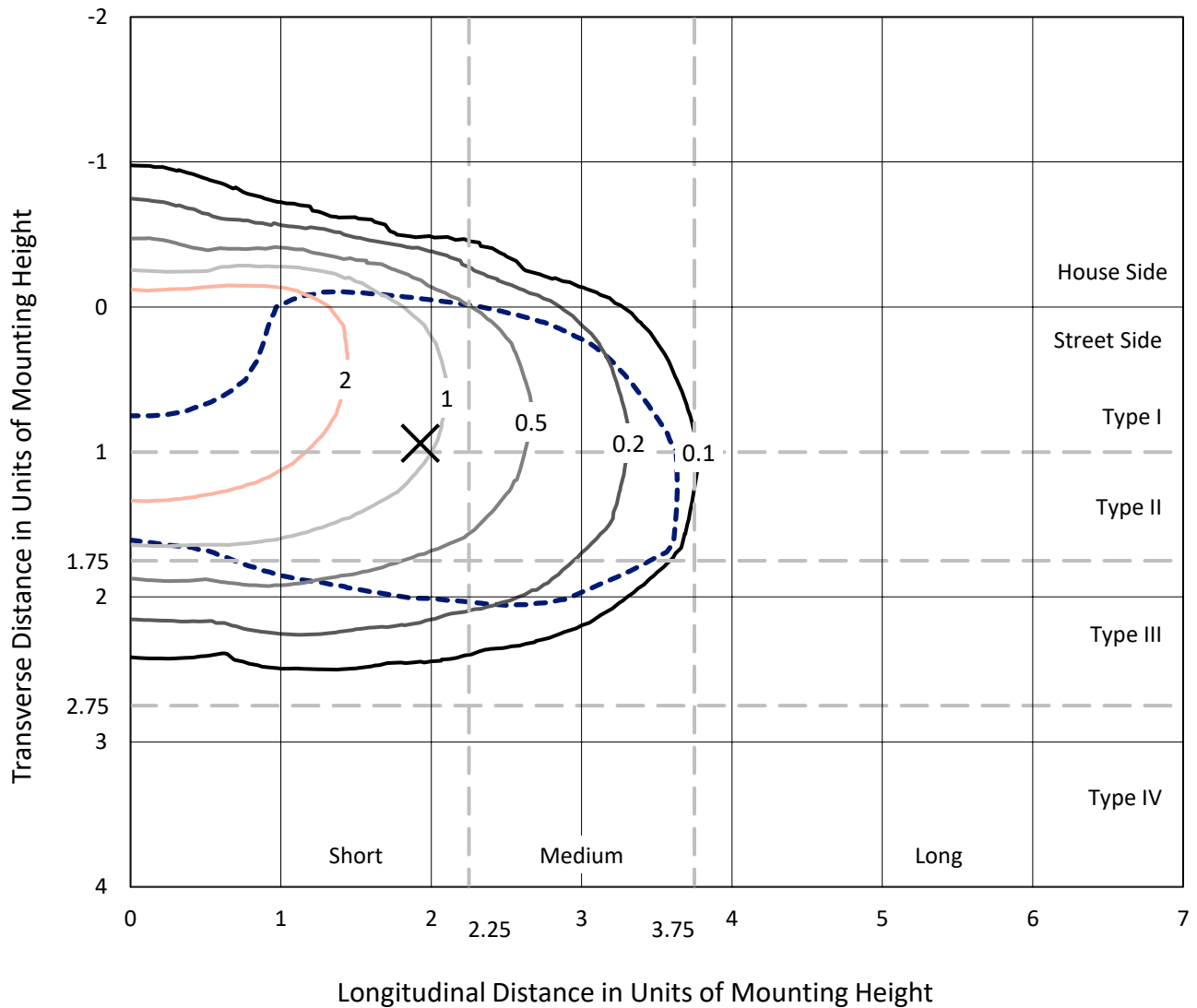
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

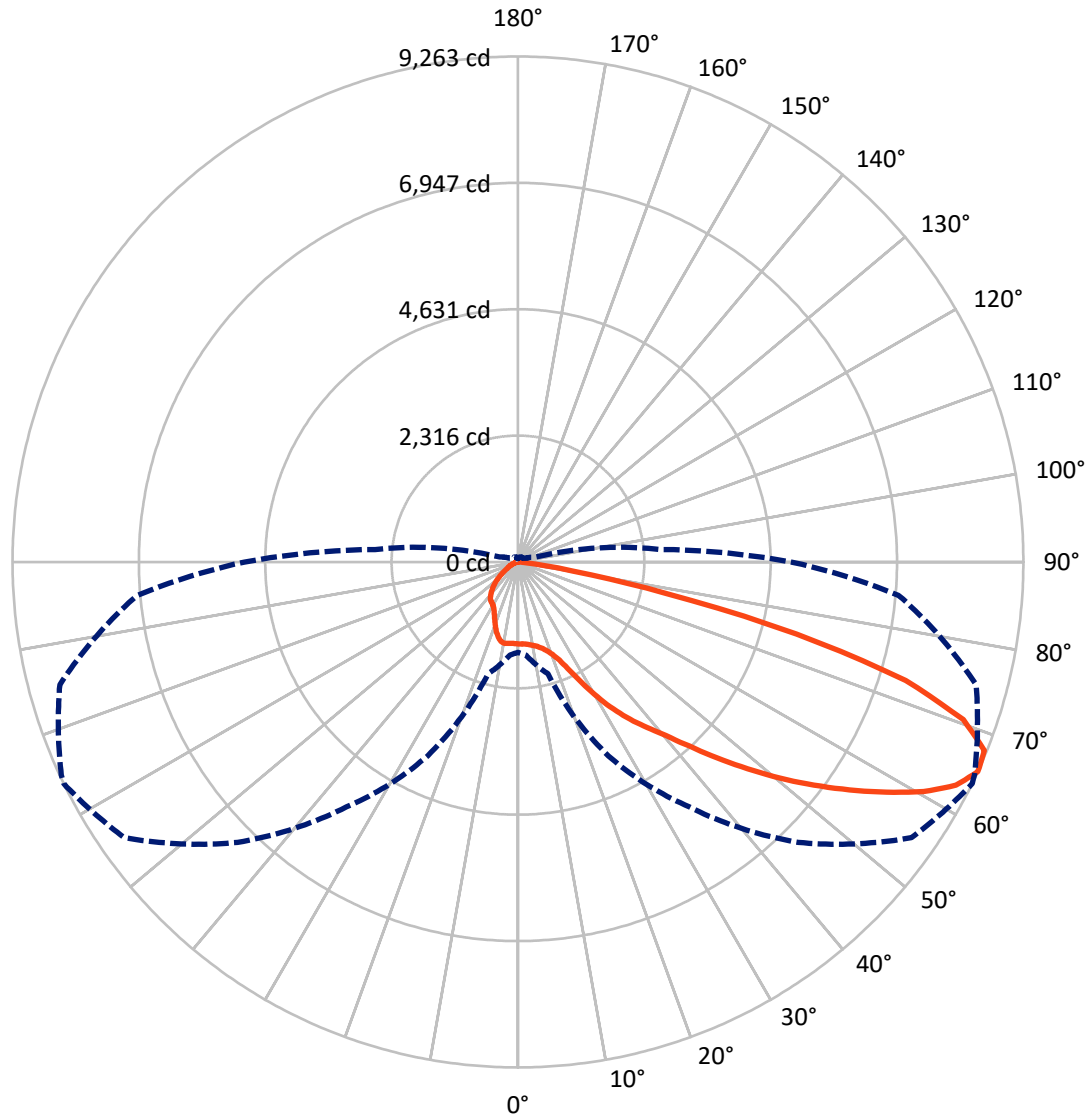
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 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	1725.9	0.0	1725.9
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	11180.1	0.0	11180.1
	% Fixture	86.6	0.0	86.6
Total	Lumens	12906.0	0.0	12906.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.5	1.1
10°-20°	375.6	2.9
20°-30°	711.8	5.5
30°-40°	1440.3	11.2
40°-50°	2453.6	19.0
50°-60°	3336.7	25.9
60°-70°	3133.3	24.3
70°-80°	1255.3	9.7
80°-90°	60.8	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°	12906.0	100.0
0°-180°	12906.0	100.0

Coefficient of Utilization



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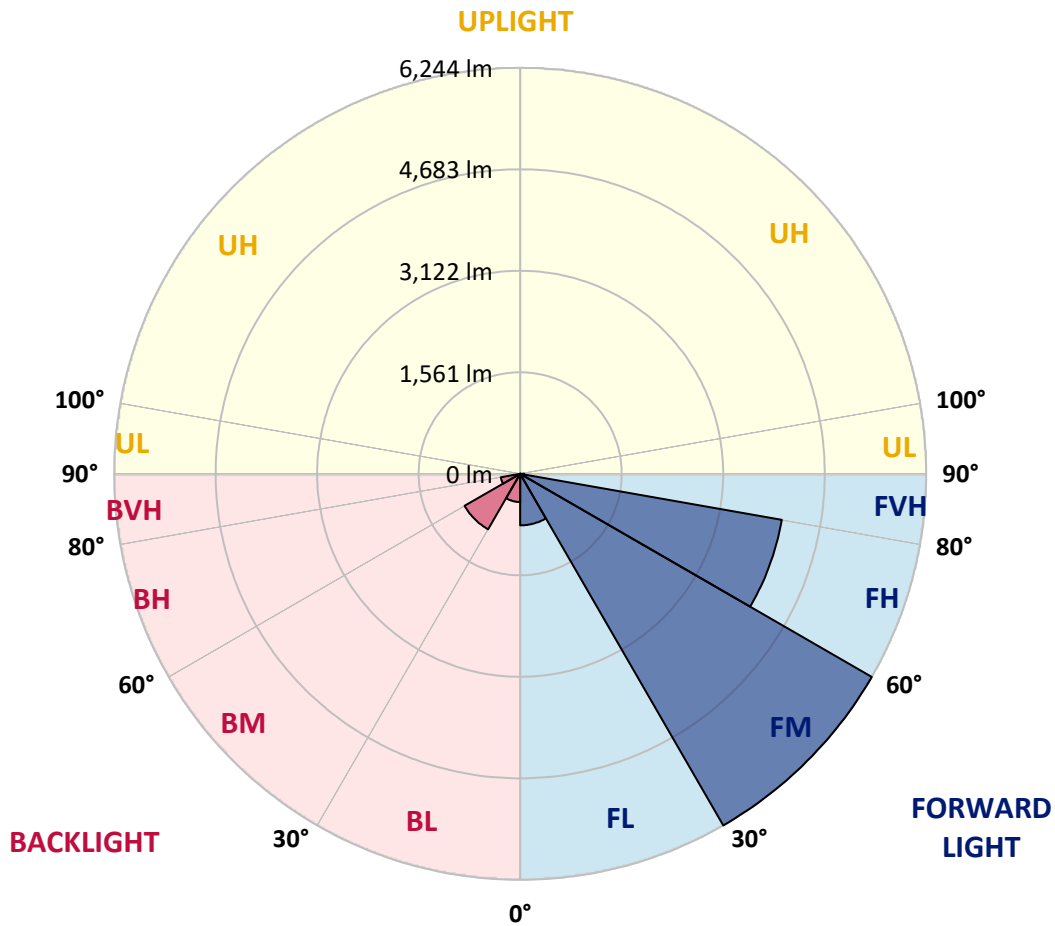
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	792.6	6.1			
FM (30°-60°)	6243.9	48.4			
FH (60°-80°)	4085.8	31.7			G2/5000
FVH (80°-90°)	57.8	0.4			G1/100
BL (0°-30°)	433.3	3.4	B1/500		
BM (30°-60°)	986.7	7.6	B1/1000		
BH (60°-80°)	302.9	2.3	B1/500		G1/500
BVH (80°-90°)	3.0	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°	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1
2.5°	1495.9	1506.3	1503.7	1501.1	1500.2	1502.0	1502.8	1502.0	1502.0	1502.0	1502.8
5°	1467.4	1476.0	1476.0	1482.1	1490.7	1501.1	1508.9	1510.6	1512.3	1514.9	1514.1
7.5°	1412.9	1419.8	1425.0	1444.9	1466.5	1494.2	1517.5	1529.7	1531.4	1540.9	1544.4
10°	1375.6	1384.3	1393.0	1413.7	1444.9	1486.4	1526.2	1555.6	1559.9	1582.4	1592.8
12.5°	1373.9	1382.6	1393.8	1416.3	1452.7	1496.8	1545.2	1587.6	1595.4	1628.3	1649.9
15°	1392.1	1402.5	1412.9	1440.5	1479.5	1533.1	1585.0	1637.8	1645.6	1692.3	1715.7
17.5°	1429.3	1443.1	1450.9	1478.6	1520.1	1579.8	1648.2	1708.7	1715.7	1770.2	1799.6
20°	1502.8	1519.3	1521.9	1544.4	1585.0	1649.0	1730.4	1805.6	1814.3	1876.6	1909.5
22.5°	1655.1	1678.5	1657.7	1668.9	1705.3	1769.3	1857.6	1952.7	1964.8	2035.8	2065.2
25°	1923.3	1956.2	1902.5	1883.5	1899.1	1965.7	2076.5	2196.7	2210.6	2267.7	2282.4
27.5°	2450.2	2407.8	2326.5	2246.9	2200.2	2238.2	2362.8	2511.6	2528.9	2584.3	2567.0
30°	3029.0	2991.8	2881.9	2705.4	2594.7	2588.6	2703.7	2869.8	2889.7	2942.5	2889.7
32.5°	3608.7	3573.2	3453.8	3236.7	3044.6	2949.4	3029.0	3213.3	3223.7	3257.4	3179.6
35°	4178.9	4142.5	4023.1	3800.8	3564.6	3348.3	3332.7	3540.4	3543.8	3579.3	3463.3
37.5°	4752.5	4722.2	4595.0	4377.0	4144.3	3845.8	3701.3	3850.1	3854.4	3889.0	3768.8
40°	5161.7	5174.7	5087.3	4918.6	4718.7	4392.6	4114.8	4179.7	4153.8	4211.7	4139.9
42.5°	5513.0	5538.9	5462.8	5378.0	5262.1	4974.8	4627.0	4615.8	4574.3	4605.4	4531.0
45°	5816.7	5838.3	5769.9	5750.0	5747.4	5545.9	5186.8	5119.3	5061.4	5055.3	4966.2
47.5°	5928.3	5969.8	5999.2	6065.8	6195.6	6110.8	5765.6	5660.9	5596.0	5548.5	5407.4
50°	5970.7	6014.8	6115.2	6309.0	6616.1	6652.4	6341.8	6224.2	6144.6	6058.0	5850.4
52.5°	5913.6	5992.3	6127.3	6453.4	6899.0	7086.8	6894.7	6791.7	6700.9	6559.9	6251.9
55°	5577.0	5655.7	5931.7	6451.7	7040.0	7391.3	7417.3	7371.4	7269.3	7047.0	6576.3
57.5°	4867.5	4984.4	5421.3	6232.0	7037.4	7653.5	7929.5	7962.3	7848.1	7529.7	6831.5
60°	3884.7	4043.0	4576.0	5744.9	6820.3	7795.3	8378.5	8542.9	8421.7	8005.6	7038.3
62.5°	2710.6	2894.1	3398.5	4981.8	6323.7	7693.3	8706.4	9010.1	8918.4	8431.3	7117.9
65°	1653.4	1712.2	2118.8	3920.2	5479.2	7265.9	8807.6	9262.7	9232.4	8691.7	7000.2
67.5°	1101.4	1150.7	1267.5	2688.1	4253.3	6411.9	8565.4	9218.6	9227.2	8649.3	6569.4
70°	663.6	706.0	782.1	1563.4	2756.5	5075.2	7815.2	8656.2	8706.4	8082.6	5752.6
72.5°	273.4	302.0	371.2	708.6	1427.6	3221.1	6223.3	7432.0	7548.8	6796.1	4415.1
75°	154.9	169.6	218.0	355.6	619.5	1501.1	3769.6	5275.9	5448.1	4684.1	2656.1
77.5°	103.0	109.9	141.0	230.1	348.7	512.2	1611.0	2748.7	3077.5	2558.4	1149.8
80°	69.2	75.3	96.9	154.0	226.7	219.8	513.1	1018.3	1252.8	879.0	280.3
82.5°	46.7	47.6	69.2	101.2	143.6	106.4	151.4	316.7	398.0	254.4	106.4
85°	26.8	26.0	51.0	58.8	64.0	44.1	45.9	95.2	124.6	107.3	60.6
87.5°	3.5	5.2	19.9	15.6	8.7	9.5	9.5	16.4	24.2	26.0	13.0
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°	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1
2.5°	1502.8	1502.0	1499.4	1496.8	1490.7	1487.3	1489.0	1487.3	1486.4	1487.3	1490.7
5°	1514.1	1511.5	1504.6	1495.9	1483.8	1469.1	1459.6	1445.7	1432.8	1425.0	1426.7
7.5°	1544.4	1541.8	1532.2	1508.0	1469.1	1407.7	1351.4	1302.1	1264.9	1243.3	1244.1
10°	1592.8	1588.5	1573.8	1520.1	1418.0	1283.9	1172.3	1079.8	1019.2	990.6	988.0
12.5°	1649.9	1644.7	1618.8	1508.9	1321.1	1111.8	957.8	854.8	798.6	773.5	770.9
15°	1717.4	1710.5	1659.4	1455.2	1180.1	921.4	780.4	703.4	667.1	644.6	645.4
17.5°	1801.3	1789.2	1689.7	1374.8	1027.0	776.1	671.4	613.4	581.4	559.8	558.0
20°	1910.3	1890.4	1713.9	1278.7	886.0	684.4	597.8	549.4	525.2	506.1	502.7
22.5°	2062.6	2034.1	1743.4	1174.9	786.5	621.2	543.3	507.9	488.0	466.3	462.9
25°	2251.2	2217.5	1779.7	1078.9	718.1	566.7	503.5	474.1	450.8	425.7	423.1
27.5°	2515.1	2454.5	1823.0	1000.2	659.3	520.0	467.2	434.3	407.5	386.7	382.4
30°	2809.3	2709.8	1861.0	952.6	605.6	476.7	419.6	386.7	361.6	346.9	344.3
32.5°	3087.9	2952.9	1886.1	931.8	557.2	427.4	367.7	332.2	313.2	308.9	311.5
35°	3350.9	3172.6	1883.5	911.9	513.9	378.1	316.7	280.3	265.6	268.2	268.2
37.5°	3653.7	3407.1	1865.3	880.8	478.4	333.1	272.5	240.5	227.5	228.4	231.9
40°	4005.8	3677.9	1854.1	821.9	439.5	291.6	236.2	210.2	200.7	197.3	196.4
42.5°	4381.3	3940.1	1855.8	755.3	391.1	254.4	211.1	189.5	180.8	178.2	177.4
45°	4758.5	4190.1	1858.4	686.1	340.0	225.8	192.9	174.8	169.6	166.1	166.1
47.5°	5113.3	4402.9	1810.0	611.7	289.8	204.2	178.2	166.1	161.8	157.5	157.5
50°	5443.8	4544.8	1693.2	525.2	250.0	186.9	167.0	158.3	154.0	149.7	149.7
52.5°	5700.7	4567.3	1500.2	436.1	222.4	173.9	160.1	152.3	147.1	142.8	141.9
55°	5814.9	4426.3	1226.0	353.0	200.7	162.7	153.1	145.4	139.3	135.0	134.1
57.5°	5785.5	4129.5	956.0	283.8	180.0	151.4	144.5	139.3	132.4	125.5	124.6
60°	5641.0	3732.4	720.7	236.2	160.9	139.3	135.0	130.6	121.1	110.7	109.0
62.5°	5391.0	3233.2	513.9	195.5	140.2	125.5	123.7	120.3	106.4	87.4	85.7
65°	5008.6	2626.7	346.1	162.7	120.3	109.9	110.7	104.7	86.5	64.9	63.2
67.5°	4449.7	1920.7	221.5	133.2	100.4	91.7	92.6	89.1	73.5	55.4	52.8
70°	3737.6	1271.8	144.5	101.2	80.5	70.9	76.1	77.0	62.3	45.0	43.3
72.5°	2740.1	751.0	101.2	75.3	58.8	49.3	62.3	64.0	50.2	33.7	32.0
75°	1561.7	356.5	76.1	54.5	36.3	34.6	48.5	48.5	34.6	22.5	20.8
77.5°	655.8	148.8	53.6	35.5	20.8	19.9	32.9	30.3	17.3	10.4	10.4
80°	189.5	66.6	28.6	17.3	8.7	7.8	13.0	9.5	4.3	1.7	1.7
82.5°	74.4	29.4	11.2	6.9	3.5	3.5	1.7	0.0	0.0	0.0	0.0
85°	44.1	12.1	5.2	2.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.2	2.6	1.7	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)