

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: P882406

Luminaire Tested: **NAV-SB2B-735-U-T2-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882406  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2B-735-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

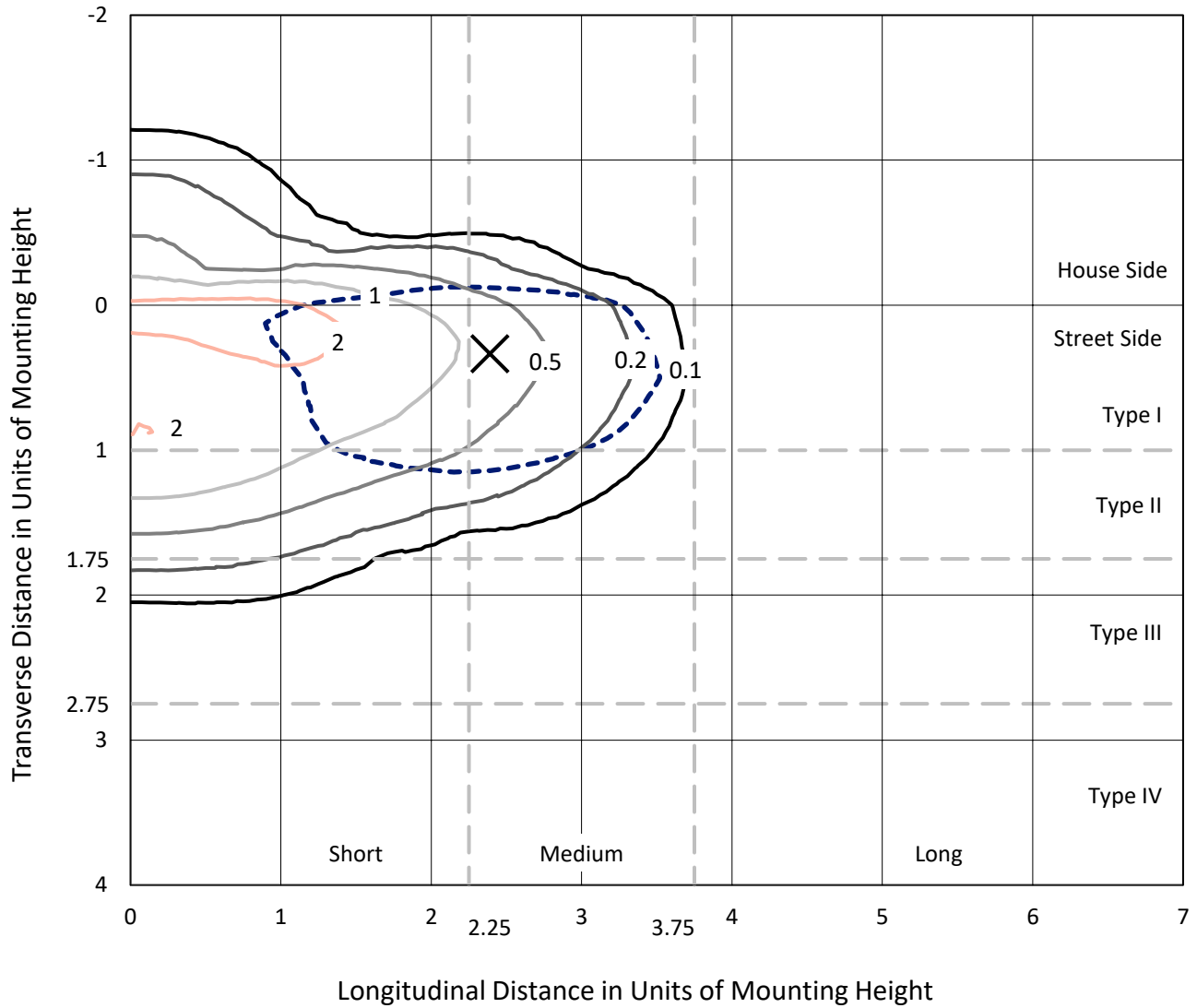
Lumens per Lamp: N/A  
Luminaire Lumens: 8380 lumens  
Efficiency: N/A  
Efficacy: 113.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 73.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.627  
Voltage Rise (V): NR  
Power Factor: 0.988  
Total Harmonic Distortion (THDi): 13.593  
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

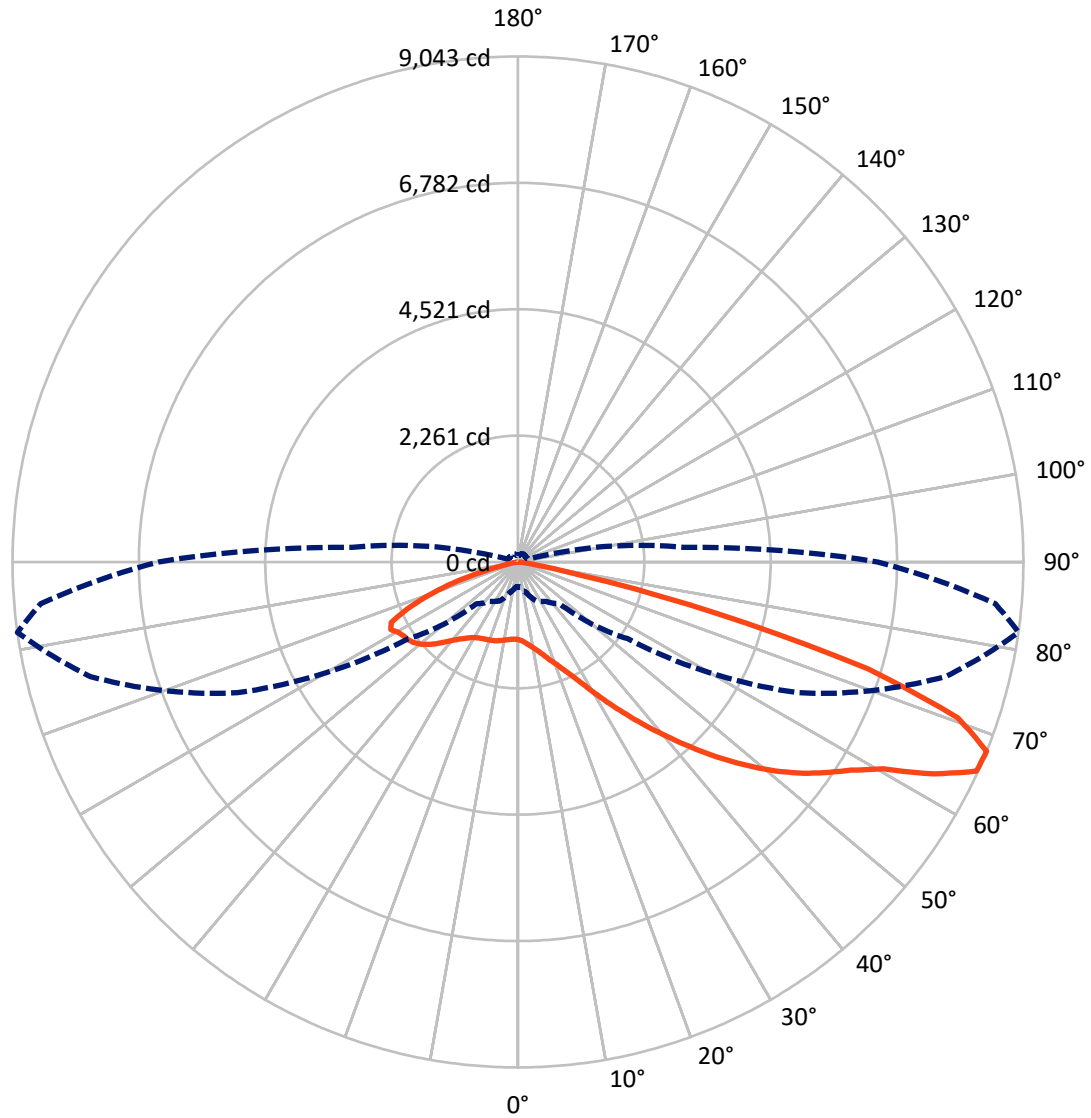
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1518.0	0.0	1518.0
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	6862.0	0.0	6862.0
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	8380.0	0.0	8380.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.7	1.5
10°-20°	321.4	3.8
20°-30°	514.8	6.1
30°-40°	910.3	10.9
40°-50°	1595.0	19.0
50°-60°	2127.2	25.4
60°-70°	1980.3	23.6
70°-80°	760.0	9.1
80°-90°	47.2	0.6
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°	8380.0	100.0
0°-180°	8380.0	100.0

**Coefficient of Utilization**



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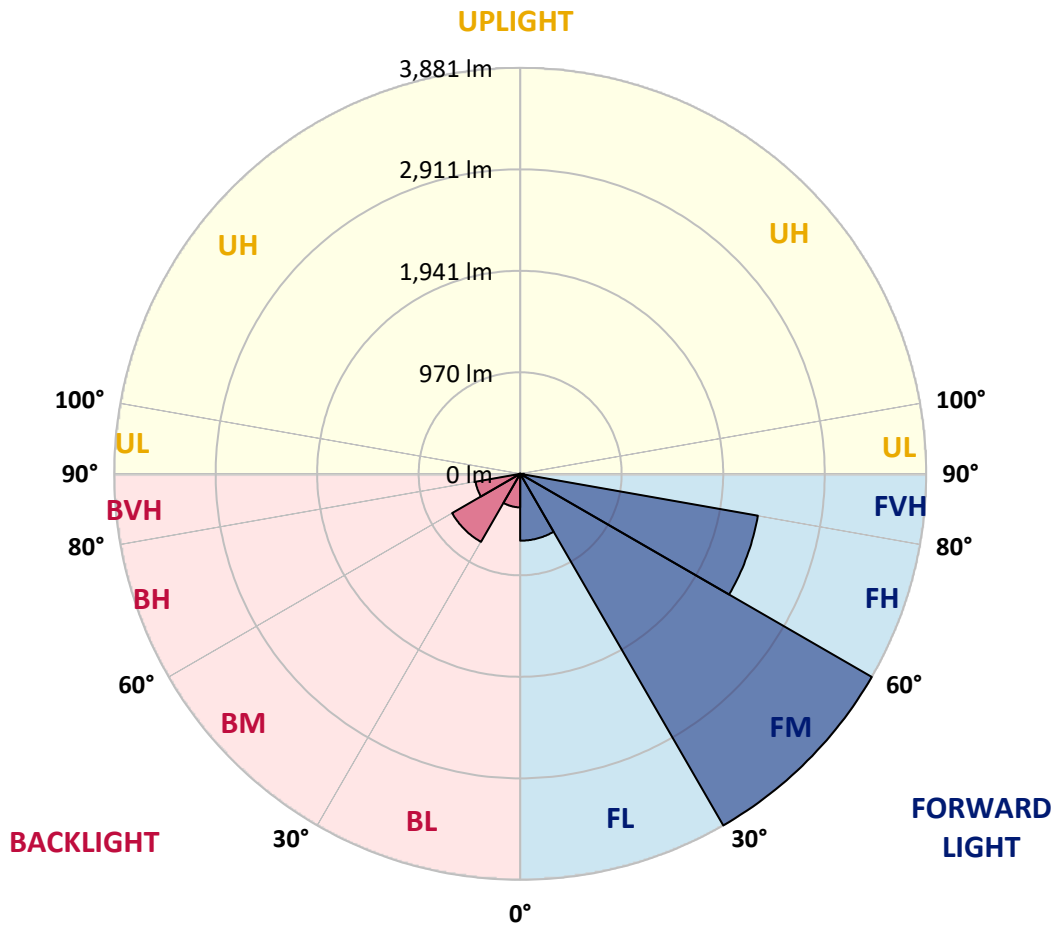
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	639.3	7.6			
FM (30°-60°)	3881.3	46.3			
FH (60°-80°)	2307.1	27.5			G2/5000
FVH (80°-90°)	34.3	0.4			G1/100
BL (0°-30°)	320.6	3.8	B1/500		
BM (30°-60°)	751.2	9.0	B1/1000		
BH (60°-80°)	433.3	5.2	B1/500		G1/500
BVH (80°-90°)	12.9	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1388.3	1388.3	1388.3	1388.3	1388.3	1388.3	1388.3	1388.3	1388.3	1388.3	1388.3
2.5°	1467.3	1475.8	1470.9	1468.5	1464.3	1458.3	1453.4	1438.4	1422.7	1412.4	1408.8
5°	1496.9	1505.3	1504.7	1507.1	1510.2	1512.0	1510.8	1493.9	1471.5	1454.0	1443.8
7.5°	1471.5	1481.2	1489.0	1501.1	1522.2	1544.5	1555.4	1551.8	1528.9	1504.7	1492.1
10°	1399.7	1410.0	1428.7	1457.1	1501.7	1550.0	1590.4	1609.1	1594.6	1568.1	1550.6
12.5°	1268.2	1278.5	1315.3	1376.8	1451.6	1535.5	1612.7	1662.8	1666.4	1639.9	1619.4
15°	1120.4	1130.7	1169.9	1247.1	1361.1	1495.7	1624.8	1719.5	1751.5	1728.6	1703.8
17.5°	1028.7	1037.7	1067.3	1129.5	1248.3	1416.0	1620.6	1779.8	1852.9	1834.8	1805.2
20°	1000.9	1008.8	1022.7	1066.1	1165.0	1333.4	1592.8	1836.6	1962.1	1951.8	1918.6
22.5°	1030.5	1037.7	1042.0	1061.3	1123.4	1279.1	1557.8	1894.5	2088.8	2090.0	2049.5
25°	1098.7	1105.9	1101.1	1113.2	1140.3	1262.2	1544.5	1962.7	2248.0	2261.3	2215.5
27.5°	1210.9	1211.5	1200.0	1199.4	1203.7	1287.5	1558.4	2035.7	2449.0	2473.7	2417.0
30°	1435.9	1426.9	1382.9	1335.2	1313.5	1363.5	1597.0	2121.9	2686.1	2730.1	2658.9
32.5°	1782.9	1769.6	1688.7	1574.7	1460.1	1486.0	1666.4	2220.3	2944.3	3023.9	2937.1
35°	2159.3	2155.7	2071.3	1901.7	1701.4	1660.4	1779.2	2349.4	3226.1	3352.8	3249.6
37.5°	2509.3	2507.5	2459.2	2259.5	2015.8	1903.5	1960.2	2518.3	3527.7	3711.1	3589.3
40°	2829.1	2834.5	2786.2	2607.6	2362.1	2215.5	2206.4	2727.1	3863.2	4101.5	3956.7
42.5°	3105.4	3111.4	3062.5	2930.4	2704.2	2560.6	2508.7	2982.9	4190.8	4520.8	4349.5
45°	3293.0	3330.4	3323.2	3217.6	3055.3	2906.3	2871.9	3303.9	4564.3	4965.5	4764.6
47.5°	3346.1	3380.5	3434.8	3449.3	3350.3	3203.7	3244.8	3690.6	4941.9	5410.7	5182.1
50°	3215.2	3247.2	3360.0	3510.2	3579.0	3533.8	3607.4	4105.1	5328.7	5854.8	5591.7
52.5°	2957.0	2989.5	3131.9	3369.6	3650.2	3792.6	3971.2	4513.6	5703.4	6275.3	5979.7
55°	2583.5	2617.9	2800.7	3069.8	3514.4	3899.4	4274.7	4921.4	6046.7	6653.6	6329.6
57.5°	2075.5	2100.8	2290.9	2667.4	3173.0	3793.2	4498.5	5366.7	6370.1	7025.3	6676.5
60°	1352.7	1375.0	1595.8	2015.8	2607.0	3438.4	4543.1	5863.2	6799.6	7508.6	7144.1
62.5°	899.6	914.7	1045.6	1353.9	1836.0	2757.3	4281.9	6259.6	7429.5	8349.6	7946.0
65°	617.2	632.3	763.2	978.0	1186.2	1823.9	3530.7	6207.1	8000.3	9017.5	8540.3
67.5°	440.4	453.1	564.1	766.8	858.6	1059.5	2393.4	5536.2	7918.2	9042.8	8572.2
70°	315.5	322.8	414.5	597.3	682.4	636.5	1331.0	4234.2	6933.0	8350.2	7919.4
72.5°	220.8	223.2	287.8	454.9	549.6	464.6	633.5	2823.0	5243.6	6554.1	6139.6
75°	149.6	152.6	193.7	333.6	441.0	354.8	335.5	1513.8	3078.2	3627.9	3252.0
77.5°	91.7	92.9	124.9	228.1	330.0	270.3	216.0	641.3	1191.0	1169.3	996.7
80°	51.9	51.9	79.6	141.8	225.0	174.4	151.4	272.7	377.1	331.2	292.0
82.5°	29.0	29.6	57.9	88.1	149.0	103.2	83.3	126.1	162.9	144.2	125.5
85°	12.1	13.3	35.6	41.6	71.2	51.3	33.8	53.1	60.3	53.7	39.2
87.5°	1.2	1.8	10.9	7.8	8.4	10.3	4.8	10.3	8.4	8.4	6.0
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°	1388.3	1388.3	1388.3	1388.3	1388.3	1388.3	1388.3	1388.3	1388.3	1388.3	1388.3
2.5°	1397.3	1388.3	1365.4	1338.8	1303.8	1286.9	1264.0	1248.3	1235.0	1236.2	1224.2
5°	1424.5	1401.6	1350.3	1286.3	1206.7	1150.0	1089.6	1048.0	1014.2	1007.0	990.7
7.5°	1461.9	1425.7	1335.8	1220.6	1086.0	984.0	892.9	834.4	792.8	779.5	766.2
10°	1510.2	1457.7	1317.1	1137.9	944.2	814.5	716.8	670.9	642.6	632.9	625.7
12.5°	1566.3	1494.5	1292.4	1037.1	798.2	673.3	611.2	588.3	579.2	576.2	574.4
15°	1636.9	1540.3	1254.9	917.7	674.5	587.0	560.5	557.5	558.7	557.5	556.9
17.5°	1720.7	1590.4	1194.0	794.6	591.3	543.0	533.4	535.8	538.8	538.2	537.0
20°	1812.4	1639.9	1116.2	685.4	534.6	511.6	506.2	508.6	511.0	509.8	509.2
22.5°	1916.8	1693.0	1029.9	600.3	496.5	482.7	476.6	477.2	477.2	474.8	473.6
25°	2041.7	1751.5	939.4	540.0	467.6	456.7	449.5	447.1	443.5	436.2	435.0
27.5°	2190.7	1813.6	852.5	497.8	444.7	434.4	426.0	419.9	410.9	398.8	397.6
30°	2358.5	1889.1	778.9	471.2	426.6	416.3	406.7	397.6	384.3	369.2	368.0
32.5°	2555.7	1969.9	725.2	453.7	410.3	399.4	387.9	377.1	362.6	347.5	348.1
35°	2791.0	2067.6	693.8	441.6	397.6	383.1	370.4	358.4	347.5	334.2	333.0
37.5°	3046.3	2171.4	684.2	435.6	389.2	366.8	352.3	343.9	342.7	334.9	334.2
40°	3325.6	2294.5	691.4	432.0	380.1	351.1	335.5	333.6	336.7	322.8	323.4
42.5°	3621.2	2440.5	703.5	427.8	367.4	335.5	320.4	320.4	318.0	298.7	298.7
45°	3941.0	2608.8	715.6	417.5	352.3	319.8	308.3	304.1	293.8	275.1	274.5
47.5°	4263.2	2780.2	724.6	398.8	334.2	306.5	296.2	286.6	271.5	254.6	254.0
50°	4569.1	2934.0	715.0	371.1	313.7	293.8	283.0	269.7	253.4	241.9	240.1
52.5°	4842.4	3067.4	673.9	338.5	292.0	280.6	270.9	257.0	243.7	231.7	230.5
55°	5080.1	3175.4	601.5	307.7	272.7	269.1	259.4	241.9	223.8	213.6	212.4
57.5°	5308.2	3257.4	511.0	282.4	255.2	256.4	241.9	226.3	209.4	198.5	197.3
60°	5611.7	3367.2	419.3	258.8	236.5	240.1	224.4	213.0	191.9	178.0	176.2
62.5°	6096.7	3538.0	333.0	229.9	214.8	216.0	209.4	195.5	170.1	153.9	152.6
65°	6481.7	3475.2	262.5	198.5	190.1	191.9	191.9	176.8	149.6	130.9	129.1
67.5°	6438.2	2975.7	209.4	167.7	166.5	167.7	172.0	159.3	132.7	117.7	115.2
70°	5930.8	2366.9	167.7	139.4	144.8	141.8	153.9	145.4	119.5	104.4	102.6
72.5°	4839.4	1705.0	127.9	115.2	111.0	115.8	138.8	130.9	99.6	82.7	80.8
75°	2827.8	909.8	95.3	91.1	80.2	96.5	123.1	111.6	76.0	60.9	59.1
77.5°	920.7	317.4	70.0	67.0	59.7	77.8	105.0	94.1	62.1	48.3	46.5
80°	246.8	95.9	47.7	44.0	38.6	57.9	83.3	74.8	44.6	31.4	30.8
82.5°	98.9	40.4	27.8	24.7	21.1	39.8	65.8	60.3	33.2	19.9	19.9
85°	32.0	13.3	10.3	7.8	9.7	24.7	39.2	41.0	23.5	10.3	7.8
87.5°	4.2	1.8	1.8	2.4	1.8	4.2	12.1	11.5	6.6	1.2	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)