

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: P882628

Luminaire Tested: **NAV-SB2C-830-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882628  
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-830-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

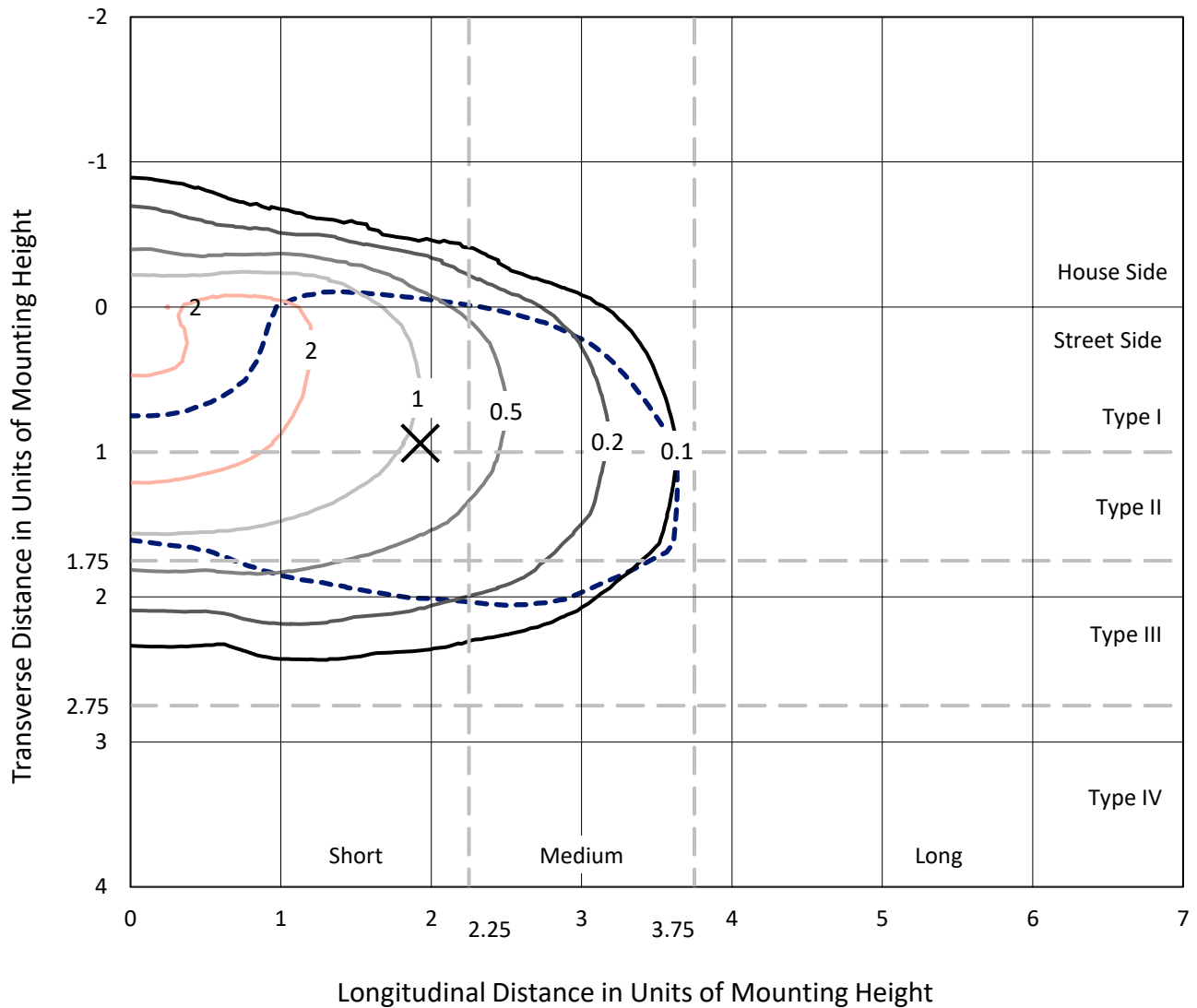
Lumens per Lamp: N/A  
Luminaire Lumens: 10474 lumens  
Efficiency: N/A  
Efficacy: 103.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 100.9  
Input Voltage (V): 120.0  
Input Current (Ain): 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

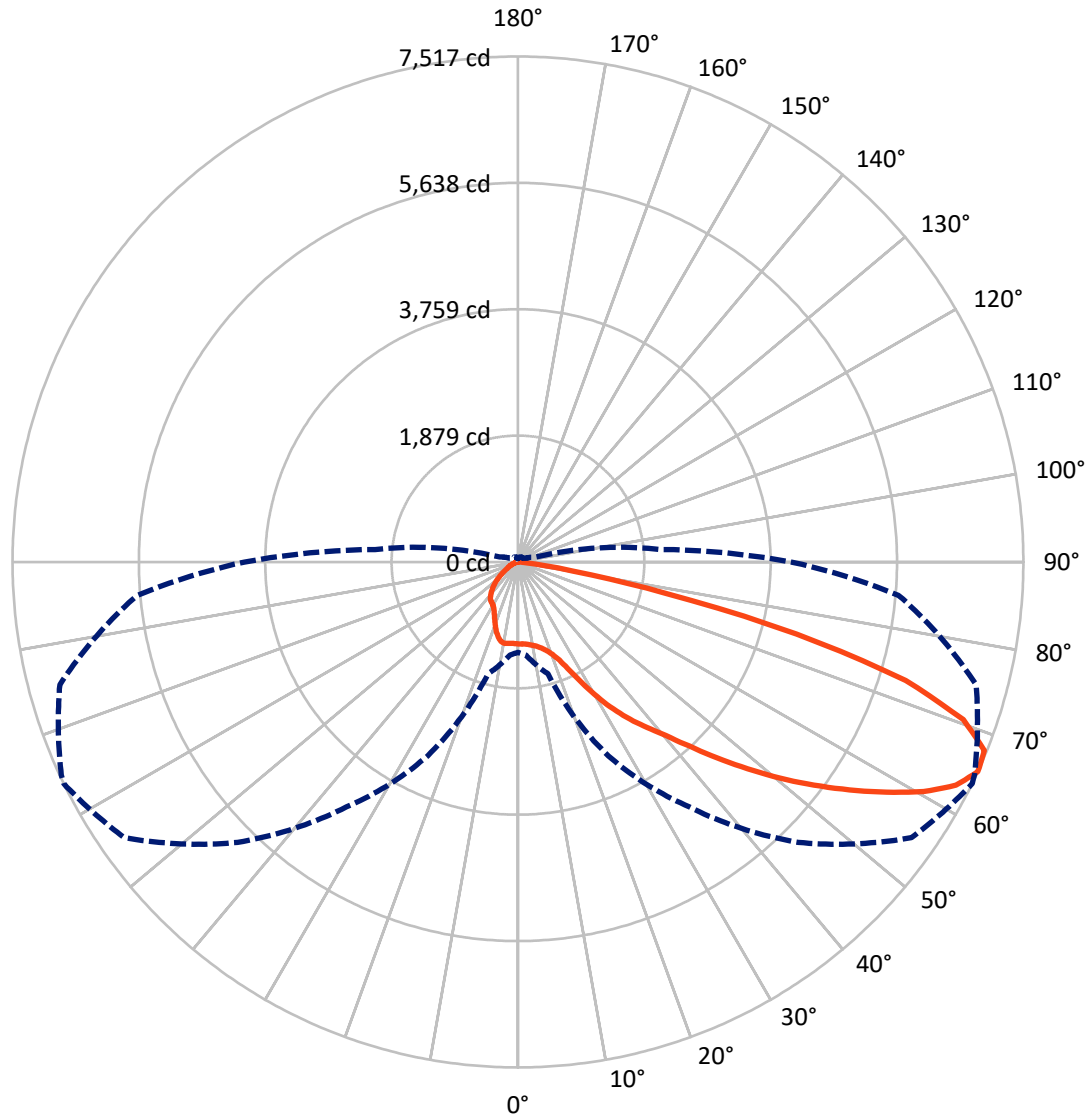
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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
<b>House Side</b>	Lumens	1400.7	0.0	1400.7
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	9073.3	0.0	9073.3
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	10474.0	0.0	10474.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.4	1.1
10°-20°	304.8	2.9
20°-30°	577.7	5.5
30°-40°	1168.9	11.2
40°-50°	1991.2	19.0
50°-60°	2707.9	25.9
60°-70°	2542.9	24.3
70°-80°	1018.8	9.7
80°-90°	49.4	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°	10474.0	100.0
0°-180°	10474.0	100.0

**Coefficient of Utilization**



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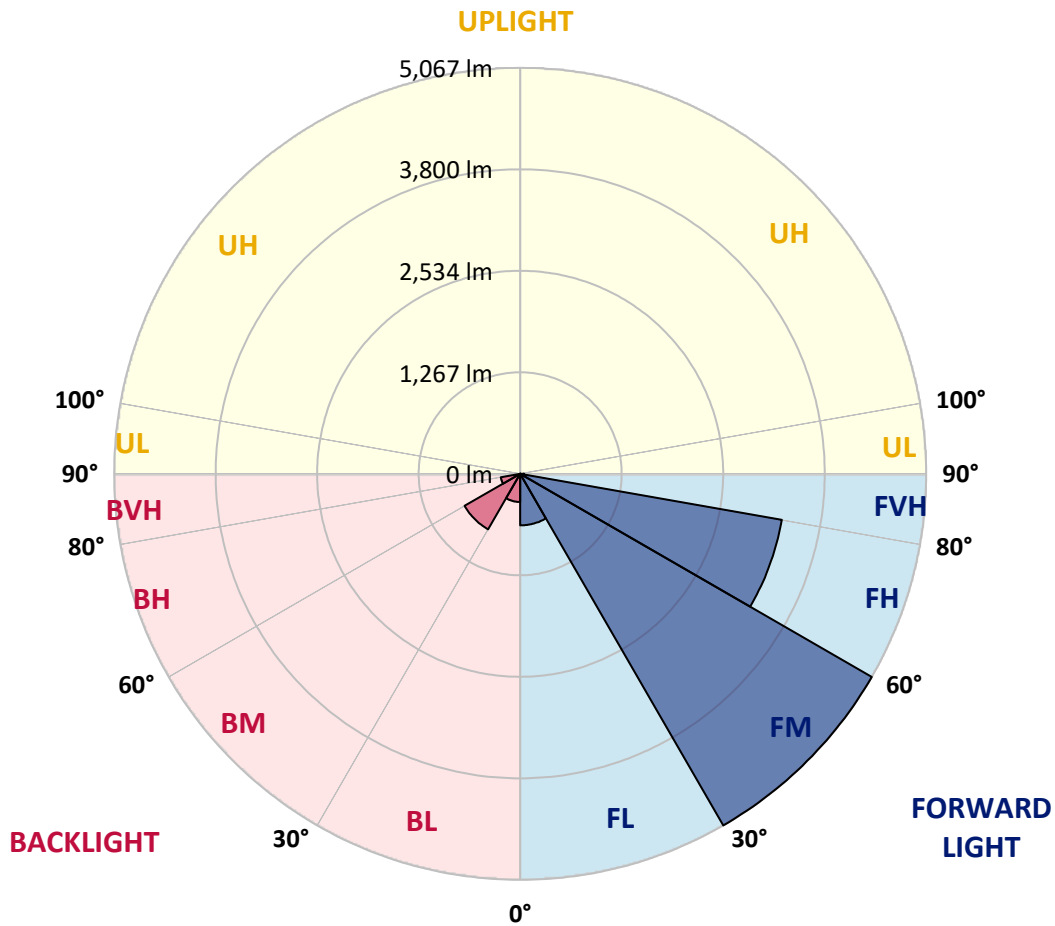
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	643.2	6.1			
FM (30°-60°)	5067.3	48.4			
FH (60°-80°)	3315.8	31.7			G2/5000
FVH (80°-90°)	46.9	0.4			G1/100
BL (0°-30°)	351.7	3.4	B1/500		
BM (30°-60°)	800.8	7.6	B1/1000		
BH (60°-80°)	245.8	2.3	B1/500		G1/500
BVH (80°-90°)	2.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: 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°	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2
2.5°	1214.0	1222.4	1220.3	1218.2	1217.5	1218.9	1219.6	1218.9	1218.9	1218.9	1219.6
5°	1190.9	1197.9	1197.9	1202.8	1209.8	1218.2	1224.6	1226.0	1227.4	1229.5	1228.8
7.5°	1146.6	1152.2	1156.4	1172.6	1190.1	1212.6	1231.6	1241.4	1242.8	1250.5	1253.3
10°	1116.4	1123.4	1130.5	1147.3	1172.6	1206.3	1238.6	1262.5	1266.0	1284.2	1292.7
12.5°	1115.0	1122.0	1131.2	1149.4	1178.9	1214.7	1254.0	1288.5	1294.8	1321.5	1339.0
15°	1129.8	1138.2	1146.6	1169.1	1200.7	1244.2	1286.3	1329.2	1335.5	1373.4	1392.4
17.5°	1160.0	1171.2	1177.5	1200.0	1233.7	1282.1	1337.6	1386.8	1392.4	1436.6	1460.5
20°	1219.6	1233.0	1235.1	1253.3	1286.3	1338.3	1404.3	1465.4	1472.4	1523.0	1549.7
22.5°	1343.2	1362.2	1345.3	1354.5	1383.9	1435.9	1507.5	1584.8	1594.6	1652.2	1676.0
25°	1560.9	1587.6	1544.0	1528.6	1541.2	1595.3	1685.2	1782.8	1794.0	1840.3	1852.3
27.5°	1988.5	1954.1	1888.1	1823.5	1785.6	1816.5	1917.6	2038.3	2052.4	2097.3	2083.3
30°	2458.2	2428.0	2338.9	2195.6	2105.8	2100.8	2194.2	2329.0	2345.2	2388.0	2345.2
32.5°	2928.7	2899.9	2803.0	2626.8	2470.9	2393.6	2458.2	2607.8	2616.2	2643.6	2580.4
35°	3391.4	3361.9	3265.0	3084.6	2892.9	2717.3	2704.7	2873.2	2876.0	2904.8	2810.7
37.5°	3856.9	3832.3	3729.1	3552.2	3363.3	3121.1	3003.8	3124.6	3128.1	3156.2	3058.6
40°	4189.0	4199.6	4128.7	3991.7	3829.5	3564.8	3339.4	3392.1	3371.0	3418.1	3359.8
42.5°	4474.1	4495.2	4433.4	4364.6	4270.5	4037.4	3755.1	3746.0	3712.3	3737.6	3677.2
45°	4720.6	4738.1	4682.7	4666.5	4664.4	4500.8	4209.4	4154.6	4107.6	4102.7	4030.4
47.5°	4811.2	4844.9	4868.7	4922.8	5028.1	4959.3	4679.1	4594.2	4541.5	4502.9	4388.5
50°	4845.6	4881.4	4962.8	5120.1	5369.4	5398.9	5146.8	5051.3	4986.7	4916.5	4748.0
52.5°	4799.2	4863.1	4972.6	5237.4	5599.0	5751.3	5595.5	5511.9	5438.2	5323.7	5073.8
55°	4526.1	4590.0	4814.0	5236.0	5713.4	5998.5	6019.6	5982.3	5899.5	5719.0	5337.1
57.5°	3950.3	4045.1	4399.7	5057.6	5711.3	6211.2	6435.2	6461.9	6369.2	6110.8	5544.2
60°	3152.7	3281.2	3713.7	4662.3	5535.1	6326.4	6799.6	6933.1	6834.8	6497.0	5712.0
62.5°	2199.8	2348.7	2758.1	4043.0	5132.0	6243.5	7065.8	7312.2	7237.8	6842.5	5776.6
65°	1341.8	1389.6	1719.6	3181.5	4446.7	5896.7	7147.9	7517.2	7492.7	7053.8	5681.1
67.5°	893.8	933.9	1028.7	2181.6	3451.8	5203.7	6951.3	7481.4	7488.5	7019.4	5331.4
70°	538.6	573.0	634.7	1268.8	2237.1	4118.8	6342.5	7025.0	7065.8	6559.5	4668.6
72.5°	221.9	245.1	301.2	575.1	1158.6	2614.1	5050.6	6031.5	6126.3	5515.4	3583.1
75°	125.7	137.6	176.9	288.6	502.7	1218.2	3059.3	4281.7	4421.5	3801.5	2155.6
77.5°	83.6	89.2	114.5	186.8	283.0	415.7	1307.4	2230.7	2497.6	2076.3	933.2
80°	56.2	61.1	78.6	125.0	184.0	178.3	416.4	826.4	1016.7	713.4	227.5
82.5°	37.9	38.6	56.2	82.2	116.6	86.4	122.9	257.0	323.0	206.4	86.4
85°	21.8	21.1	41.4	47.7	52.0	35.8	37.2	77.2	101.1	87.1	49.2
87.5°	2.8	4.2	16.1	12.6	7.0	7.7	7.7	13.3	19.7	21.1	10.5
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°	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2
2.5°	1219.6	1218.9	1216.8	1214.7	1209.8	1207.0	1208.4	1207.0	1206.3	1207.0	1209.8
5°	1228.8	1226.7	1221.0	1214.0	1204.2	1192.3	1184.5	1173.3	1162.8	1156.4	1157.8
7.5°	1253.3	1251.2	1243.5	1223.9	1192.3	1142.4	1096.8	1056.7	1026.5	1009.0	1009.7
10°	1292.7	1289.2	1277.2	1233.7	1150.8	1042.0	951.4	876.3	827.1	804.0	801.9
12.5°	1339.0	1334.8	1313.7	1224.6	1072.2	902.3	777.3	693.7	648.1	627.7	625.6
15°	1393.8	1388.2	1346.7	1181.0	957.7	747.8	633.3	570.9	541.4	523.1	523.8
17.5°	1461.9	1452.1	1371.3	1115.7	833.5	629.8	544.9	497.8	471.8	454.3	452.9
20°	1550.4	1534.2	1391.0	1037.8	719.0	555.4	485.2	445.9	426.2	410.8	408.0
22.5°	1673.9	1650.8	1414.8	953.5	638.3	504.1	441.0	412.2	396.0	378.5	375.7
25°	1827.0	1799.6	1444.3	875.6	582.8	459.9	408.7	384.8	365.8	345.5	343.4
27.5°	2041.2	1992.0	1479.4	811.7	535.0	422.0	379.2	352.5	330.7	313.9	310.4
30°	2279.9	2199.1	1510.3	773.1	491.5	386.9	340.5	313.9	293.5	281.6	279.5
32.5°	2506.0	2396.4	1530.7	756.2	452.2	346.9	298.4	269.6	254.2	250.7	252.8
35°	2719.4	2574.8	1528.6	740.1	417.1	306.8	257.0	227.5	215.6	217.7	217.7
37.5°	2965.2	2765.1	1513.8	714.8	388.3	270.3	221.2	195.2	184.7	185.4	188.2
40°	3251.0	2984.9	1504.7	667.0	356.7	236.6	191.7	170.6	162.9	160.1	159.4
42.5°	3555.7	3197.6	1506.1	613.0	317.4	206.4	171.3	153.8	146.7	144.6	143.9
45°	3861.8	3400.5	1508.2	556.8	275.9	183.3	156.6	141.8	137.6	134.8	134.8
47.5°	4149.7	3573.3	1468.9	496.4	235.2	165.7	144.6	134.8	131.3	127.8	127.8
50°	4417.9	3688.4	1374.1	426.2	202.9	151.7	135.5	128.5	125.0	121.5	121.5
52.5°	4626.5	3706.7	1217.5	353.9	180.5	141.1	129.9	123.6	119.4	115.9	115.2
55°	4719.2	3592.2	995.0	286.5	162.9	132.0	124.3	118.0	113.0	109.5	108.8
57.5°	4695.3	3351.4	775.9	230.3	146.0	122.9	117.3	113.0	107.4	101.8	101.1
60°	4578.0	3029.1	584.9	191.7	130.6	113.0	109.5	106.0	98.3	89.9	88.5
62.5°	4375.1	2623.9	417.1	158.7	113.7	101.8	100.4	97.6	86.4	70.9	69.5
65°	4064.8	2131.7	280.9	132.0	97.6	89.2	89.9	85.0	70.2	52.7	51.3
67.5°	3611.2	1558.8	179.8	108.1	81.4	74.4	75.1	72.3	59.7	44.9	42.8
70°	3033.3	1032.2	117.3	82.2	65.3	57.6	61.8	62.5	50.6	36.5	35.1
72.5°	2223.7	609.5	82.2	61.1	47.7	40.0	50.6	52.0	40.7	27.4	26.0
75°	1267.4	289.3	61.8	44.2	29.5	28.1	39.3	39.3	28.1	18.3	16.9
77.5°	532.2	120.8	43.5	28.8	16.9	16.1	26.7	24.6	14.0	8.4	8.4
80°	153.8	54.1	23.2	14.0	7.0	6.3	10.5	7.7	3.5	1.4	1.4
82.5°	60.4	23.9	9.1	5.6	2.8	2.8	1.4	0.0	0.0	0.0	0.0
85°	35.8	9.8	4.2	2.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.1	2.1	1.4	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)