

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: P883068

Luminaire Tested: **NAV-SB3B-727-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883068  
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-SB3B-727-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

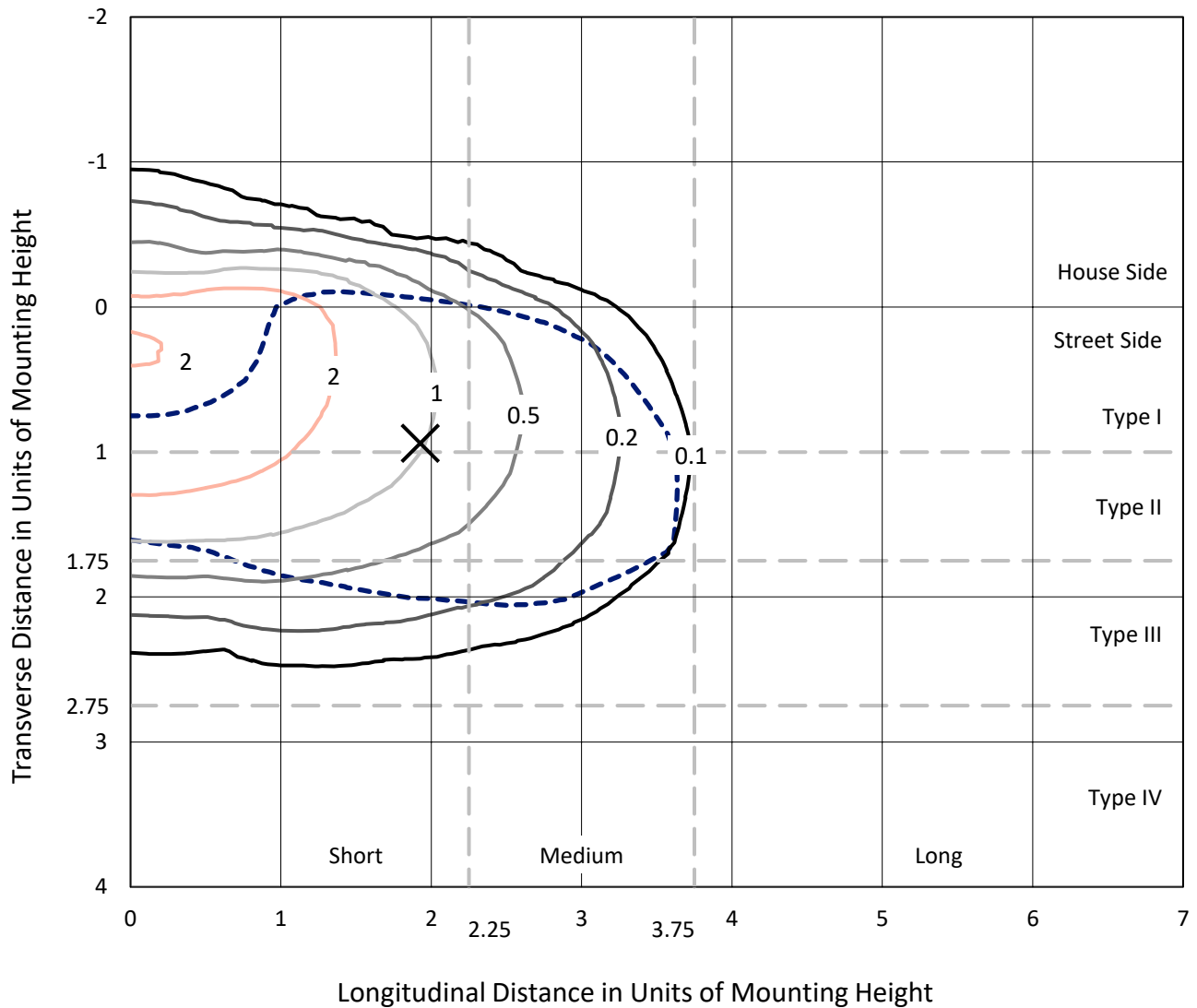
Lumens per Lamp: N/A  
Luminaire Lumens: 12005 lumens  
Efficiency: N/A  
Efficacy: 109.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 109.2  
Input Voltage (V): 120.0  
Input Current (Ain): 0.919  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.657  
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

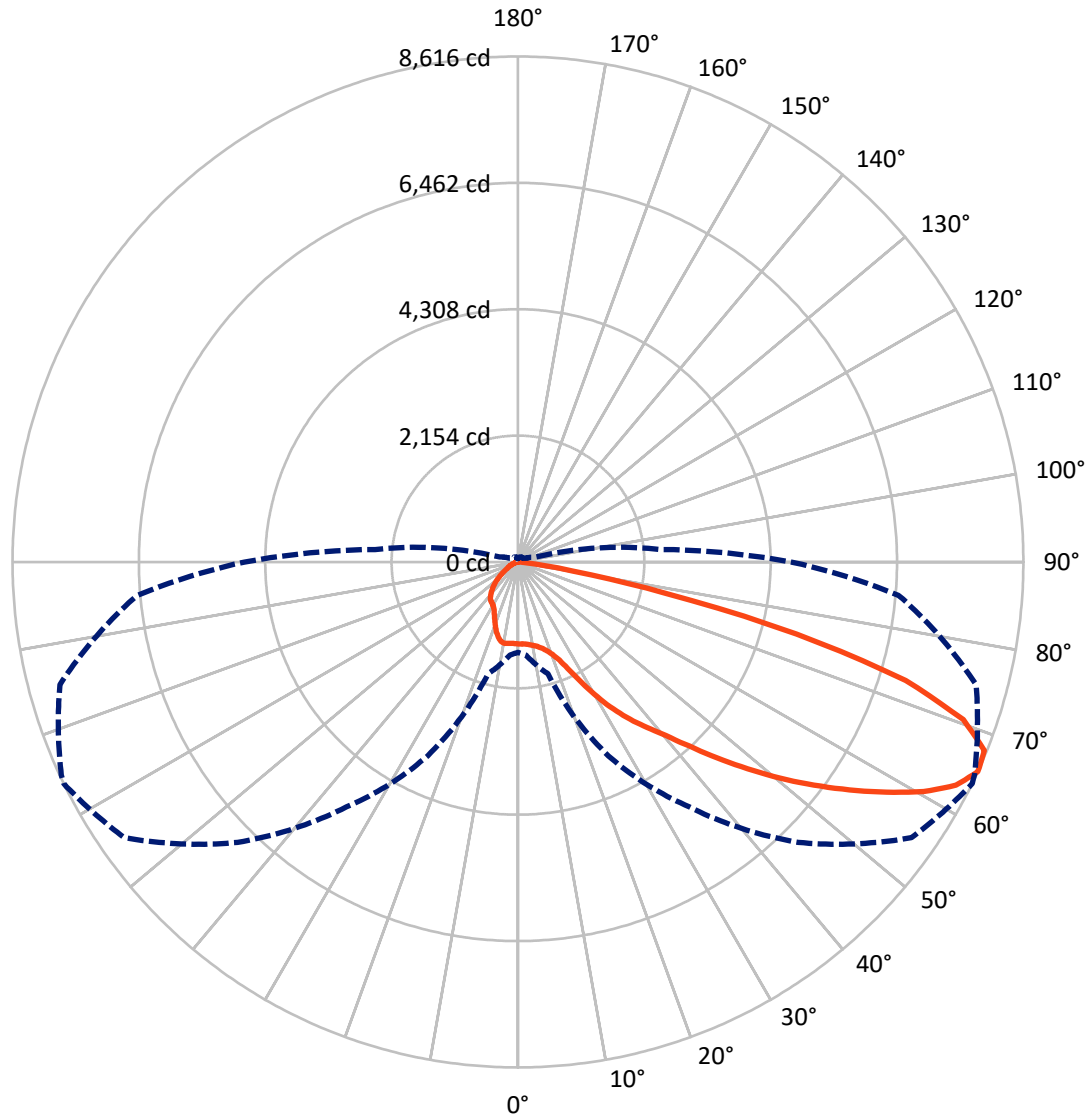
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 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	1605.4	0.0	1605.4
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	10399.6	0.0	10399.6
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	12005.0	0.0	12005.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.8	1.1
10°-20°	349.4	2.9
20°-30°	662.1	5.5
30°-40°	1339.8	11.2
40°-50°	2282.3	19.0
50°-60°	3103.8	25.9
60°-70°	2914.6	24.3
70°-80°	1167.7	9.7
80°-90°	56.6	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°	12005.0	100.0
0°-180°	12005.0	100.0

**Coefficient of Utilization**



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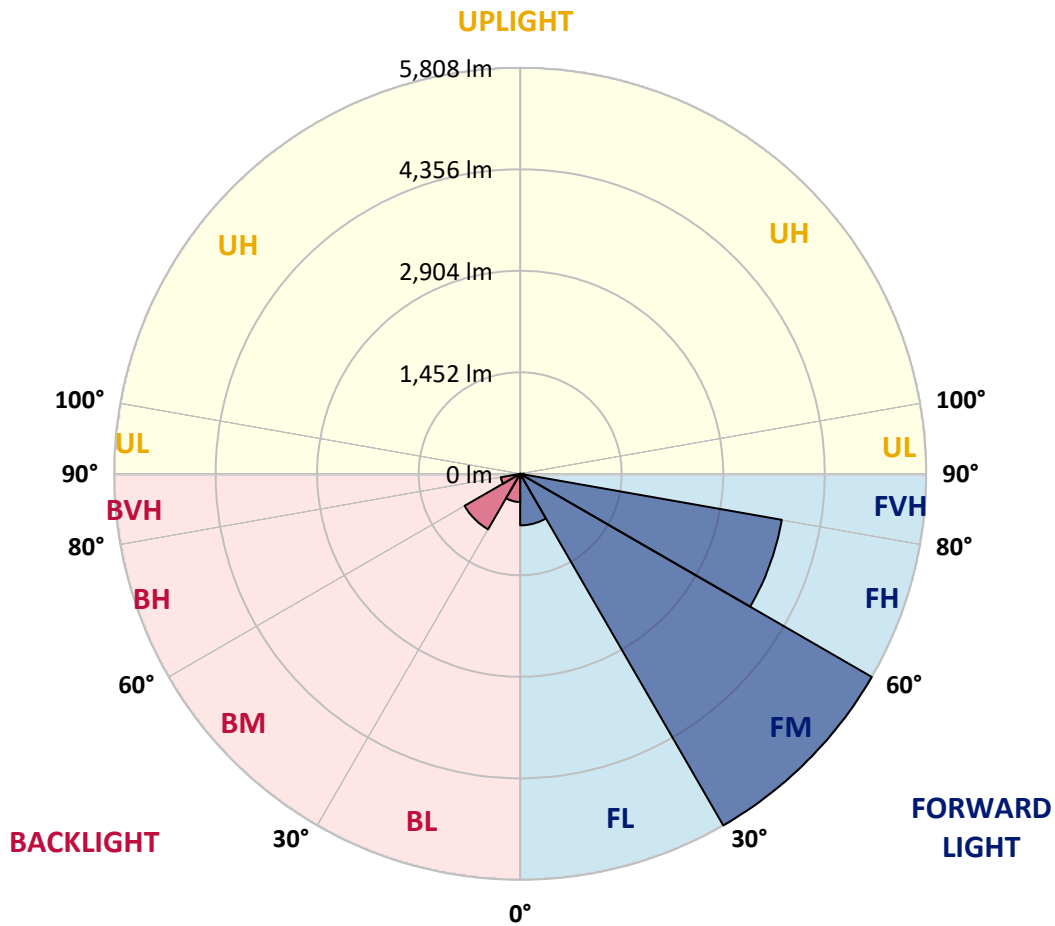
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	737.2	6.1			
FM (30°-60°)	5808.0	48.4			
FH (60°-80°)	3800.5	31.7			G2/5000
FVH (80°-90°)	53.8	0.4			G1/100
BL (0°-30°)	403.1	3.4	B1/500		
BM (30°-60°)	917.8	7.6	B1/1000		
BH (60°-80°)	281.8	2.3	B1/500		G1/500
BVH (80°-90°)	2.8	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°	1396.3	1396.3	1396.3	1396.3	1396.3	1396.3	1396.3	1396.3	1396.3	1396.3	1396.3
2.5°	1391.5	1401.1	1398.7	1396.3	1395.5	1397.1	1397.9	1397.1	1397.1	1397.1	1397.9
5°	1364.9	1373.0	1373.0	1378.6	1386.6	1396.3	1403.5	1405.2	1406.8	1409.2	1408.4
7.5°	1314.2	1320.7	1325.5	1344.0	1364.1	1389.9	1411.6	1422.9	1424.5	1433.3	1436.5
10°	1279.6	1287.7	1295.7	1315.0	1344.0	1382.6	1419.6	1447.0	1451.0	1472.0	1481.6
12.5°	1278.0	1286.1	1296.5	1317.4	1351.2	1392.3	1437.4	1476.8	1484.0	1514.6	1534.7
15°	1294.9	1304.6	1314.2	1340.0	1376.2	1426.1	1474.4	1523.5	1530.7	1574.2	1595.9
17.5°	1329.5	1342.4	1349.6	1375.4	1414.0	1469.5	1533.1	1589.5	1595.9	1646.6	1674.0
20°	1397.9	1413.2	1415.6	1436.5	1474.4	1533.9	1609.6	1679.6	1687.6	1745.6	1776.2
22.5°	1539.6	1561.3	1542.0	1552.4	1586.2	1645.8	1727.9	1816.4	1827.7	1893.7	1921.0
25°	1789.0	1819.6	1769.7	1752.0	1766.5	1828.5	1931.5	2043.4	2056.2	2109.3	2123.0
27.5°	2279.2	2239.7	2164.1	2090.0	2046.6	2082.0	2197.9	2336.3	2352.4	2403.9	2387.8
30°	2817.6	2783.0	2680.7	2516.6	2413.6	2407.9	2515.0	2669.5	2688.0	2737.1	2688.0
32.5°	3356.8	3323.8	3212.7	3010.7	2832.0	2743.5	2817.6	2989.0	2998.6	3030.0	2957.6
35°	3887.1	3853.3	3742.3	3535.4	3315.7	3114.5	3100.0	3293.2	3296.4	3329.4	3221.6
37.5°	4420.7	4392.5	4274.2	4071.4	3854.9	3577.3	3442.9	3581.3	3585.3	3617.5	3505.7
40°	4801.4	4813.4	4732.1	4575.2	4389.3	4085.9	3827.6	3887.9	3863.8	3917.7	3850.9
42.5°	5128.1	5152.2	5081.4	5002.6	4894.7	4627.5	4304.0	4293.5	4254.9	4283.9	4214.7
45°	5410.6	5430.7	5367.1	5348.6	5346.2	5158.7	4824.7	4761.9	4708.0	4702.4	4619.5
47.5°	5514.4	5553.0	5580.4	5642.4	5763.1	5684.2	5363.1	5265.7	5205.4	5161.1	5029.9
50°	5553.8	5594.9	5688.2	5868.5	6154.2	6188.0	5899.1	5789.6	5715.6	5635.1	5442.0
52.5°	5500.7	5574.0	5699.5	6002.9	6417.4	6592.0	6413.4	6317.6	6233.1	6101.9	5815.4
55°	5187.7	5260.9	5517.6	6001.3	6548.6	6875.3	6899.4	6856.8	6761.8	6555.0	6117.2
57.5°	4527.7	4636.4	5042.8	5796.9	6546.1	7119.1	7375.9	7406.5	7300.2	7004.1	6354.6
60°	3613.5	3760.8	4256.5	5343.8	6344.1	7251.1	7793.6	7946.5	7833.8	7446.7	6546.9
62.5°	2521.4	2692.0	3161.2	4634.0	5882.2	7156.2	8098.6	8381.1	8295.7	7842.7	6621.0
65°	1537.9	1592.7	1970.9	3646.5	5096.7	6758.6	8192.7	8616.1	8587.9	8084.9	6511.5
67.5°	1024.5	1070.4	1179.0	2500.5	3956.3	5964.3	7967.4	8575.0	8583.1	8045.5	6110.8
70°	617.3	656.7	727.5	1454.3	2564.1	4720.9	7269.6	8051.9	8098.6	7518.3	5351.0
72.5°	254.3	280.9	345.3	659.1	1327.9	2996.2	5788.8	6913.1	7021.8	6321.6	4106.8
75°	144.1	157.7	202.8	330.8	576.2	1396.3	3506.5	4907.6	5067.7	4357.1	2470.7
77.5°	95.8	102.2	131.2	214.1	324.3	476.4	1498.5	2556.8	2862.6	2379.8	1069.6
80°	64.4	70.0	90.1	143.3	210.9	204.4	477.2	947.2	1165.3	817.7	260.8
82.5°	43.5	44.3	64.4	94.2	133.6	99.0	140.8	294.6	370.2	236.6	99.0
85°	24.9	24.1	47.5	54.7	59.6	41.0	42.7	88.5	115.9	99.8	56.3
87.5°	3.2	4.8	18.5	14.5	8.0	8.9	8.9	15.3	22.5	24.1	12.1
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°	1396.3	1396.3	1396.3	1396.3	1396.3	1396.3	1396.3	1396.3	1396.3	1396.3	1396.3
2.5°	1397.9	1397.1	1394.7	1392.3	1386.6	1383.4	1385.0	1383.4	1382.6	1383.4	1386.6
5°	1408.4	1406.0	1399.5	1391.5	1380.2	1366.5	1357.7	1344.8	1332.7	1325.5	1327.1
7.5°	1436.5	1434.1	1425.3	1402.7	1366.5	1309.4	1257.1	1211.2	1176.6	1156.5	1157.3
10°	1481.6	1477.6	1463.9	1414.0	1319.0	1194.3	1090.5	1004.4	948.0	921.5	919.1
12.5°	1534.7	1529.9	1505.8	1403.5	1228.9	1034.2	890.9	795.1	742.8	719.5	717.1
15°	1597.5	1591.1	1543.6	1353.7	1097.7	857.1	725.9	654.3	620.5	599.6	600.4
17.5°	1675.6	1664.3	1571.7	1278.8	955.3	721.9	624.5	570.6	540.8	520.7	519.1
20°	1777.0	1758.5	1594.3	1189.5	824.1	636.6	556.1	511.0	488.5	470.8	467.6
22.5°	1918.6	1892.1	1621.6	1092.9	731.6	577.8	505.4	472.4	453.9	433.8	430.6
25°	2094.1	2062.7	1655.4	1003.6	668.0	527.1	468.4	441.0	419.3	396.0	393.5
27.5°	2339.5	2283.2	1695.7	930.3	613.2	483.7	434.6	404.0	379.1	359.7	355.7
30°	2613.1	2520.6	1731.1	886.1	563.4	443.4	390.3	359.7	336.4	322.7	320.3
32.5°	2872.3	2746.7	1754.4	866.8	518.3	397.6	342.0	309.0	291.3	287.3	289.7
35°	3116.9	2951.2	1752.0	848.2	478.0	351.7	294.6	260.8	247.1	249.5	249.5
37.5°	3398.6	3169.3	1735.1	819.3	445.0	309.8	253.5	223.7	211.7	212.5	215.7
40°	3726.2	3421.2	1724.7	764.5	408.8	271.2	219.7	195.6	186.7	183.5	182.7
42.5°	4075.4	3665.0	1726.3	702.6	363.8	236.6	196.4	176.2	168.2	165.8	165.0
45°	4426.3	3897.6	1728.7	638.2	316.3	210.0	179.5	162.6	157.7	154.5	154.5
47.5°	4756.3	4095.6	1683.6	569.0	269.6	189.9	165.8	154.5	150.5	146.5	146.5
50°	5063.7	4227.5	1575.0	488.5	232.6	173.8	155.3	147.3	143.3	139.2	139.2
52.5°	5302.7	4248.5	1395.5	405.6	206.8	161.8	148.9	141.6	136.8	132.8	132.0
55°	5409.0	4117.3	1140.4	328.4	186.7	151.3	142.4	135.2	129.6	125.5	124.7
57.5°	5381.6	3841.3	889.3	264.0	167.4	140.8	134.4	129.6	123.1	116.7	115.9
60°	5247.2	3471.9	670.4	219.7	149.7	129.6	125.5	121.5	112.7	103.0	101.4
62.5°	5014.6	3007.5	478.0	181.9	130.4	116.7	115.1	111.9	99.0	81.3	79.7
65°	4658.9	2443.3	321.9	151.3	111.9	102.2	103.0	97.4	80.5	60.4	58.7
67.5°	4139.0	1786.6	206.0	123.9	93.4	85.3	86.1	82.9	68.4	51.5	49.1
70°	3476.7	1183.0	134.4	94.2	74.8	66.0	70.8	71.6	57.9	41.8	40.2
72.5°	2548.8	698.6	94.2	70.0	54.7	45.9	57.9	59.6	46.7	31.4	29.8
75°	1452.6	331.6	70.8	50.7	33.8	32.2	45.1	45.1	32.2	20.9	19.3
77.5°	610.0	138.4	49.9	33.0	19.3	18.5	30.6	28.2	16.1	9.7	9.7
80°	176.2	62.0	26.6	16.1	8.0	7.2	12.1	8.9	4.0	1.6	1.6
82.5°	69.2	27.4	10.5	6.4	3.2	3.2	1.6	0.0	0.0	0.0	0.0
85°	41.0	11.3	4.8	2.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.5	2.4	1.6	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)