

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: P883948

Luminaire Tested: **NAV-SB4C-740-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883948
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-SB4C-740-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 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: 25663 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

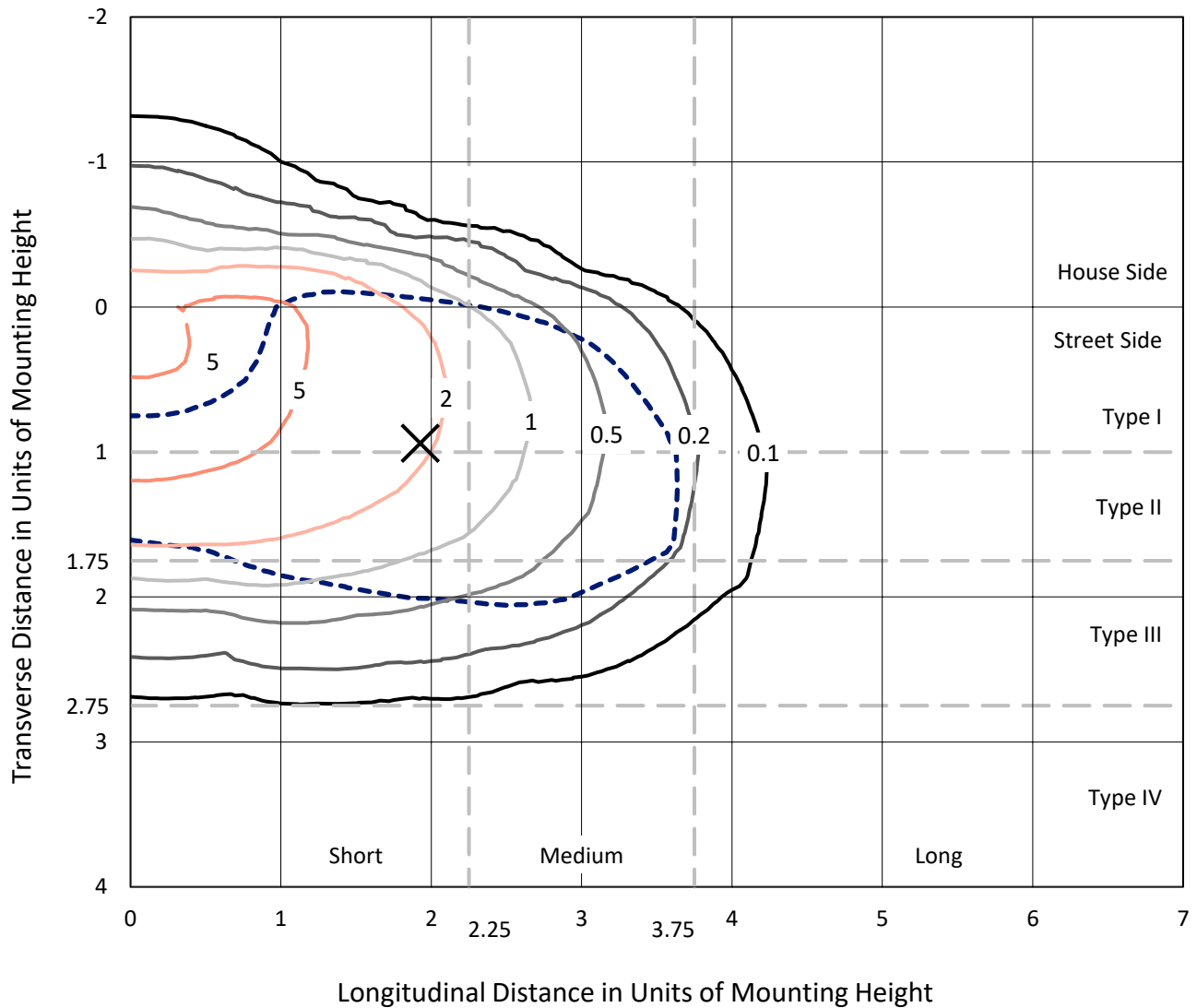
Input Watts (W): 200.7
Input Voltage (V): 120.0
Input Current (Ain): 1.714
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

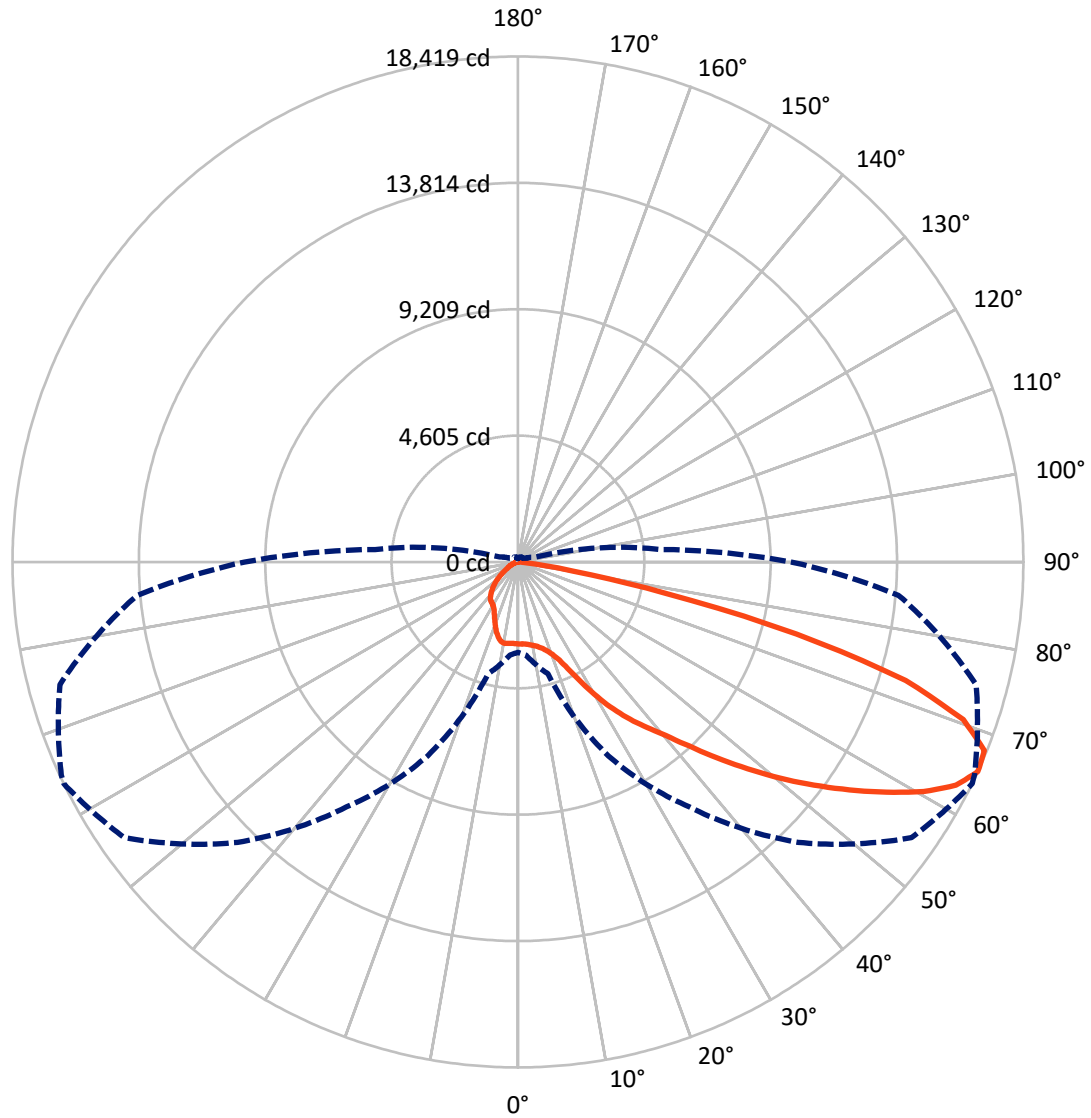
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 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
House Side	Lumens	3431.9	0.0	3431.9
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	22231.1	0.0	22231.1
	% Fixture	86.6	0.0	86.6
Total	Lumens	25663.0	0.0	25663.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.4	1.1
10°-20°	746.9	2.9
20°-30°	1415.3	5.5
30°-40°	2864.0	11.2
40°-50°	4878.9	19.0
50°-60°	6634.9	25.9
60°-70°	6230.5	24.3
70°-80°	2496.2	9.7
80°-90°	120.9	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°	25663.0	100.0
0°-180°	25663.0	100.0

Coefficient of Utilization



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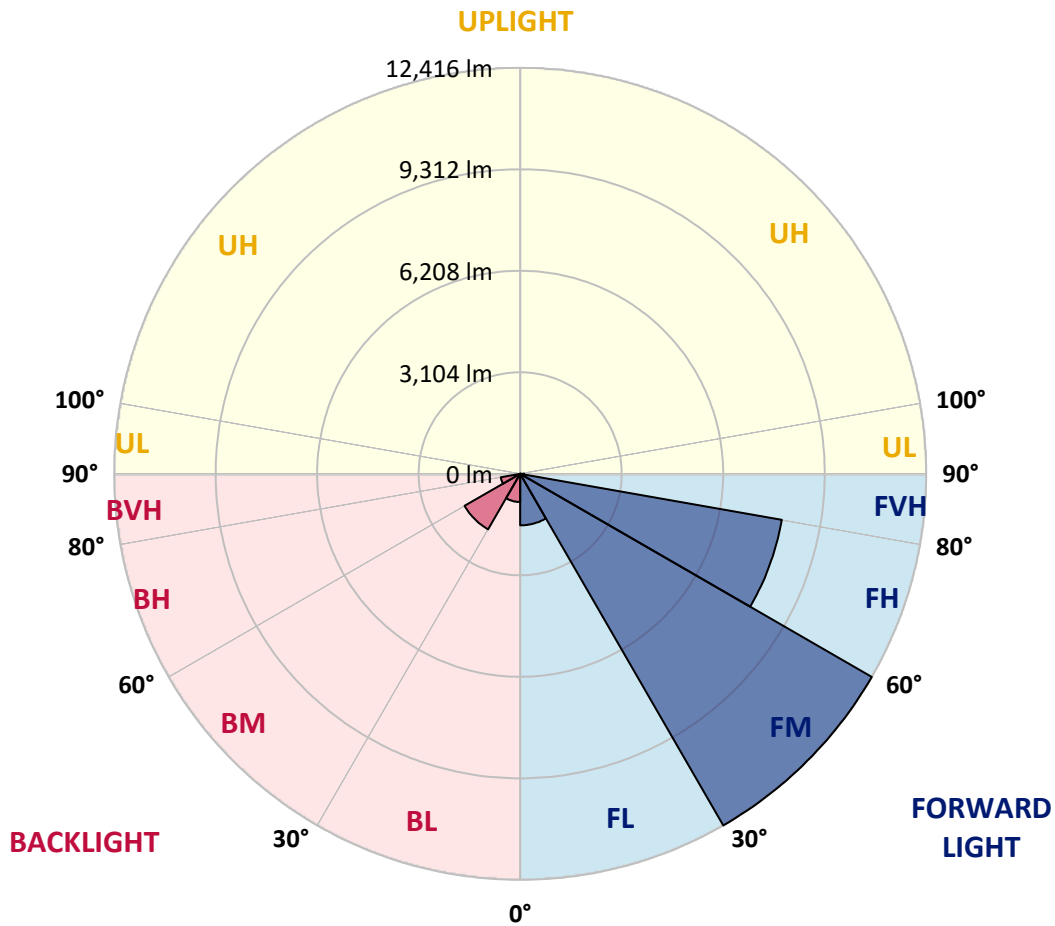
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1576.0	6.1			
FM (30°-60°)	12415.7	48.4			
FH (60°-80°)	8124.3	31.7			G4/12000
FVH (80°-90°)	115.0	0.4			G2/225
BL (0°-30°)	861.7	3.4	B2/1000		
BM (30°-60°)	1962.0	7.6	B2/2500		
BH (60°-80°)	602.4	2.3	B2/1000		G2/1000
BVH (80°-90°)	5.9	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-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2984.9	2984.9	2984.9	2984.9	2984.9	2984.9	2984.9	2984.9	2984.9	2984.9	2984.9
2.5°	2974.6	2995.2	2990.0	2984.9	2983.2	2986.6	2988.3	2986.6	2986.6	2986.6	2988.3
5°	2917.8	2935.0	2935.0	2947.0	2964.2	2984.9	3000.4	3003.8	3007.2	3012.4	3010.7
7.5°	2809.4	2823.2	2833.5	2873.0	2916.1	2971.1	3017.6	3041.6	3045.1	3064.0	3070.9
10°	2735.4	2752.6	2769.8	2811.1	2873.0	2955.6	3034.8	3093.3	3101.9	3146.6	3167.2
12.5°	2732.0	2749.2	2771.5	2816.3	2888.5	2976.3	3072.6	3156.9	3172.4	3237.8	3280.8
15°	2768.1	2788.7	2809.4	2864.4	2941.9	3048.5	3151.8	3256.7	3272.2	3365.1	3411.5
17.5°	2842.1	2869.6	2885.1	2940.1	3022.7	3141.4	3277.3	3397.8	3411.5	3519.9	3578.4
20°	2988.3	3021.0	3026.2	3070.9	3151.8	3279.1	3440.8	3590.4	3607.7	3731.5	3796.9
22.5°	3291.1	3337.6	3296.3	3318.6	3390.9	3518.2	3693.7	3882.9	3907.0	4048.1	4106.6
25°	3824.4	3889.8	3783.1	3745.3	3776.3	3908.7	4128.9	4368.1	4395.6	4509.1	4538.4
27.5°	4872.1	4787.8	4626.1	4467.8	4374.9	4450.6	4698.4	4994.3	5028.7	5138.8	5104.4
30°	6023.1	5949.1	5730.6	5379.7	5159.4	5147.4	5376.2	5706.5	5746.1	5851.0	5746.1
32.5°	7175.7	7105.2	6867.8	6436.0	6054.0	5864.8	6023.1	6389.5	6410.2	6477.3	6322.4
35°	8309.5	8237.2	7999.8	7557.7	7088.0	6657.9	6626.9	7039.8	7046.7	7117.2	6886.7
37.5°	9450.1	9389.9	9137.0	8703.4	8240.7	7647.1	7359.8	7655.7	7664.3	7733.1	7494.0
40°	10263.8	10289.6	10115.9	9780.4	9383.0	8734.4	8182.2	8311.2	8259.6	8374.8	8232.1
42.5°	10962.3	11013.9	10862.5	10693.9	10463.4	9892.2	9200.6	9178.3	9095.7	9157.6	9009.7
45°	11566.2	11609.2	11473.3	11433.7	11428.5	11027.7	10313.7	10179.5	10064.3	10052.2	9875.0
47.5°	11788.1	11870.7	11929.2	12061.6	12319.7	12151.1	11464.7	11256.5	11127.5	11032.8	10752.4
50°	11872.4	11960.1	12159.7	12545.1	13155.8	13228.1	12610.4	12376.5	12218.2	12046.2	11633.3
52.5°	11758.9	11915.4	12183.8	12832.4	13718.4	14091.7	13709.8	13505.0	13324.4	13044.0	12431.5
55°	11089.6	11246.2	11795.0	12828.9	13998.8	14697.3	14748.9	14657.7	14454.7	14012.6	13076.7
57.5°	9678.9	9911.2	10780.0	12392.0	13993.6	15218.6	15767.4	15832.7	15605.6	14972.5	13584.2
60°	7724.5	8039.4	9099.1	11423.4	13561.8	15500.7	16660.2	16987.1	16746.3	15918.8	13995.4
62.5°	5390.0	5754.7	6757.7	9906.0	12574.3	15297.7	17312.3	17916.1	17733.8	16765.2	14153.6
65°	3287.7	3404.6	4213.2	7795.1	10895.2	14447.8	17513.6	18418.5	18358.3	17283.0	13919.7
67.5°	2190.1	2288.1	2520.4	5345.2	8457.4	12749.8	17031.8	18330.7	18347.9	17198.7	13062.9
70°	1319.5	1403.8	1555.2	3108.7	5481.2	10091.8	15540.3	17212.5	17312.3	16071.9	11438.9
72.5°	543.6	600.4	738.0	1409.0	2838.6	6405.0	12374.8	14778.1	15010.4	13513.6	8779.1
75°	307.9	337.2	433.5	707.1	1231.8	2984.9	7495.7	10490.9	10833.3	9314.2	5281.6
77.5°	204.7	218.5	280.4	457.6	693.3	1018.5	3203.4	5465.7	6119.4	5087.2	2286.4
80°	137.6	149.7	192.7	306.2	450.7	437.0	1020.2	2024.9	2491.1	1747.9	557.4
82.5°	92.9	94.6	137.6	201.3	285.6	211.6	301.1	629.7	791.4	505.8	211.6
85°	53.3	51.6	101.5	117.0	127.3	87.7	91.2	189.2	247.7	213.3	120.4
87.5°	6.9	10.3	39.6	31.0	17.2	18.9	18.9	32.7	48.2	51.6	25.8
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°	2984.9	2984.9	2984.9	2984.9	2984.9	2984.9	2984.9	2984.9	2984.9	2984.9	2984.9
2.5°	2988.3	2986.6	2981.4	2976.3	2964.2	2957.3	2960.8	2957.3	2955.6	2957.3	2964.2
5°	3010.7	3005.5	2991.8	2974.6	2950.5	2921.2	2902.3	2874.8	2849.0	2833.5	2836.9
7.5°	3070.9	3065.7	3046.8	2998.6	2921.2	2799.1	2687.2	2589.2	2515.2	2472.2	2473.9
10°	3167.2	3158.6	3129.4	3022.7	2819.7	2553.1	2331.1	2147.0	2026.6	1969.8	1964.7
12.5°	3280.8	3270.5	3218.8	3000.4	2627.0	2210.7	1904.5	1699.7	1587.9	1538.0	1532.9
15°	3415.0	3401.2	3299.7	2893.7	2346.6	1832.2	1551.8	1398.7	1326.4	1281.7	1283.4
17.5°	3581.8	3557.8	3359.9	2733.7	2042.1	1543.2	1335.0	1219.8	1156.1	1113.1	1109.7
20°	3798.6	3759.0	3408.1	2542.7	1761.7	1360.8	1188.8	1092.4	1044.3	1006.4	999.5
22.5°	4101.4	4044.6	3466.6	2336.3	1563.8	1235.2	1080.4	1009.9	970.3	927.3	920.4
25°	4476.4	4409.4	3538.8	2145.3	1427.9	1126.9	1001.3	942.8	896.3	846.4	841.3
27.5°	5001.2	4880.7	3624.9	1988.8	1310.9	1034.0	929.0	863.6	810.3	769.0	760.4
30°	5586.1	5388.3	3700.6	1894.1	1204.3	947.9	834.4	769.0	719.1	689.9	684.7
32.5°	6140.1	5871.7	3750.4	1852.9	1107.9	849.9	731.2	660.6	622.8	614.2	619.3
35°	6663.1	6308.7	3745.3	1813.3	1021.9	751.8	629.7	557.4	528.2	533.3	533.3
37.5°	7265.2	6774.9	3709.2	1751.4	951.4	662.3	541.9	478.3	452.5	454.2	461.1
40°	7965.4	7313.4	3686.8	1634.4	874.0	579.8	469.7	418.1	399.1	392.2	390.5
42.5°	8712.0	7834.6	3690.2	1501.9	777.6	505.8	419.8	376.8	359.6	354.4	352.7
45°	9462.1	8331.8	3695.4	1364.3	676.1	449.0	383.6	347.5	337.2	330.3	330.3
47.5°	10167.5	8755.1	3599.1	1216.3	576.3	406.0	354.4	330.3	321.7	313.1	313.1
50°	10824.7	9037.2	3366.8	1044.3	497.2	371.6	332.0	314.8	306.2	297.6	297.6
52.5°	11335.6	9081.9	2983.2	867.1	442.1	345.8	318.3	302.8	292.5	283.9	282.1
55°	11562.7	8801.5	2437.8	701.9	399.1	323.4	304.5	289.0	277.0	268.4	266.7
57.5°	11504.2	8211.4	1901.0	564.3	357.8	301.1	287.3	277.0	263.2	249.5	247.7
60°	11216.9	7421.8	1433.1	469.7	320.0	277.0	268.4	259.8	240.9	220.2	216.8
62.5°	10719.7	6429.1	1021.9	388.8	278.7	249.5	246.0	239.1	211.6	173.8	170.3
65°	9959.3	5223.1	688.2	323.4	239.1	218.5	220.2	208.2	172.0	129.0	125.6
67.5°	8848.0	3819.3	440.4	264.9	199.6	182.4	184.1	177.2	146.2	110.1	104.9
70°	7432.1	2529.0	287.3	201.3	160.0	141.1	151.4	153.1	123.9	89.5	86.0
72.5°	5448.5	1493.3	201.3	149.7	117.0	98.1	123.9	127.3	99.8	67.1	63.7
75°	3105.3	708.8	151.4	108.4	72.3	68.8	96.3	96.3	68.8	44.7	41.3
77.5°	1304.1	295.9	106.7	70.5	41.3	39.6	65.4	60.2	34.4	20.6	20.6
80°	376.8	132.5	56.8	34.4	17.2	15.5	25.8	18.9	8.6	3.4	3.4
82.5°	148.0	58.5	22.4	13.8	6.9	6.9	3.4	0.0	0.0	0.0	0.0
85°	87.7	24.1	10.3	5.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	22.4	5.2	3.4	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)