

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: P884618

Luminaire Tested: **NAV-SB5C-735-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884618  
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-SB5C-735-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

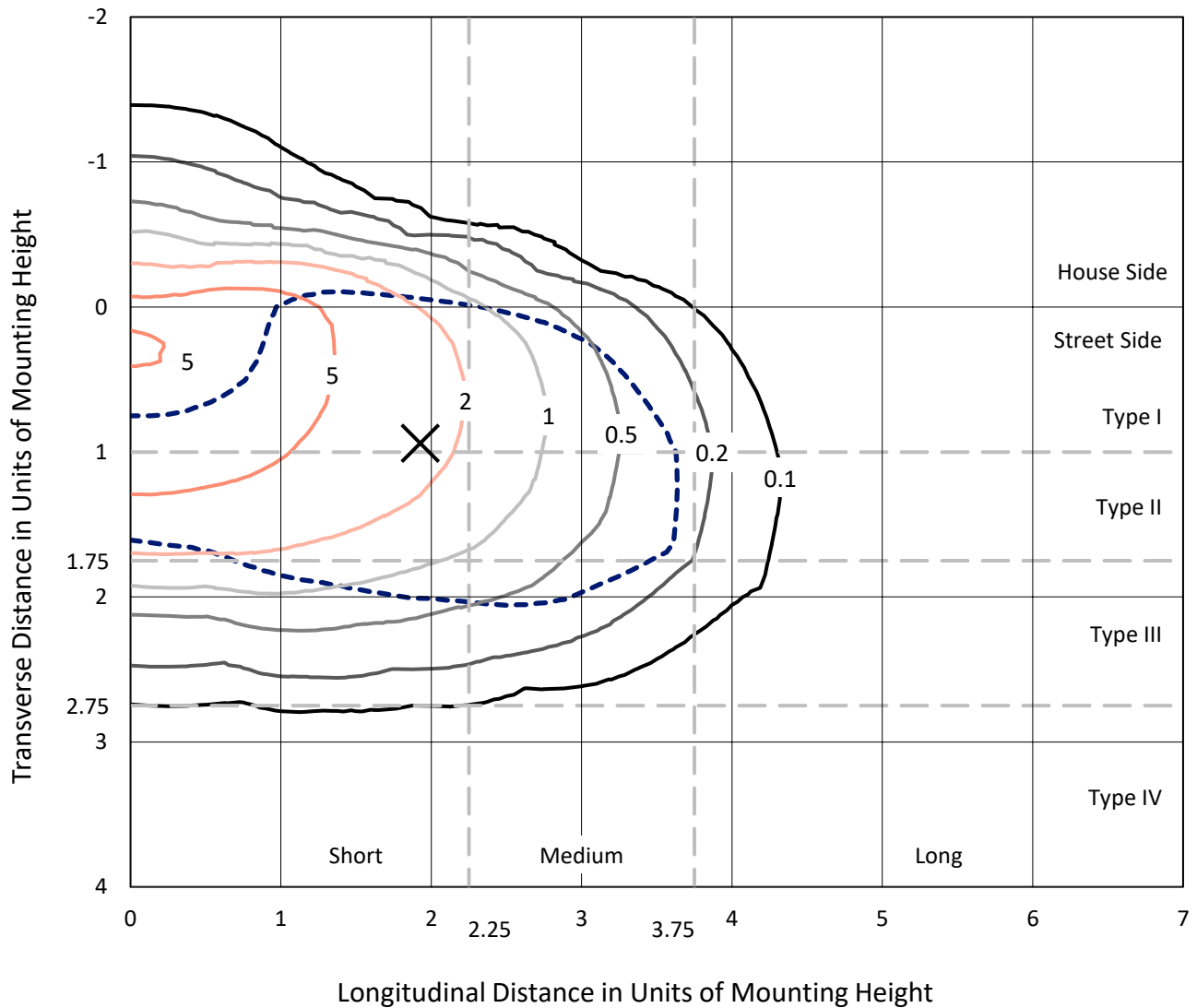
Lumens per Lamp: N/A  
Luminaire Lumens: 29804 lumens  
Efficiency: N/A  
Efficacy: 119.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 249.5  
Input Voltage (V): 120.0  
Input Current (Ain): 2.116  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 7.885  
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

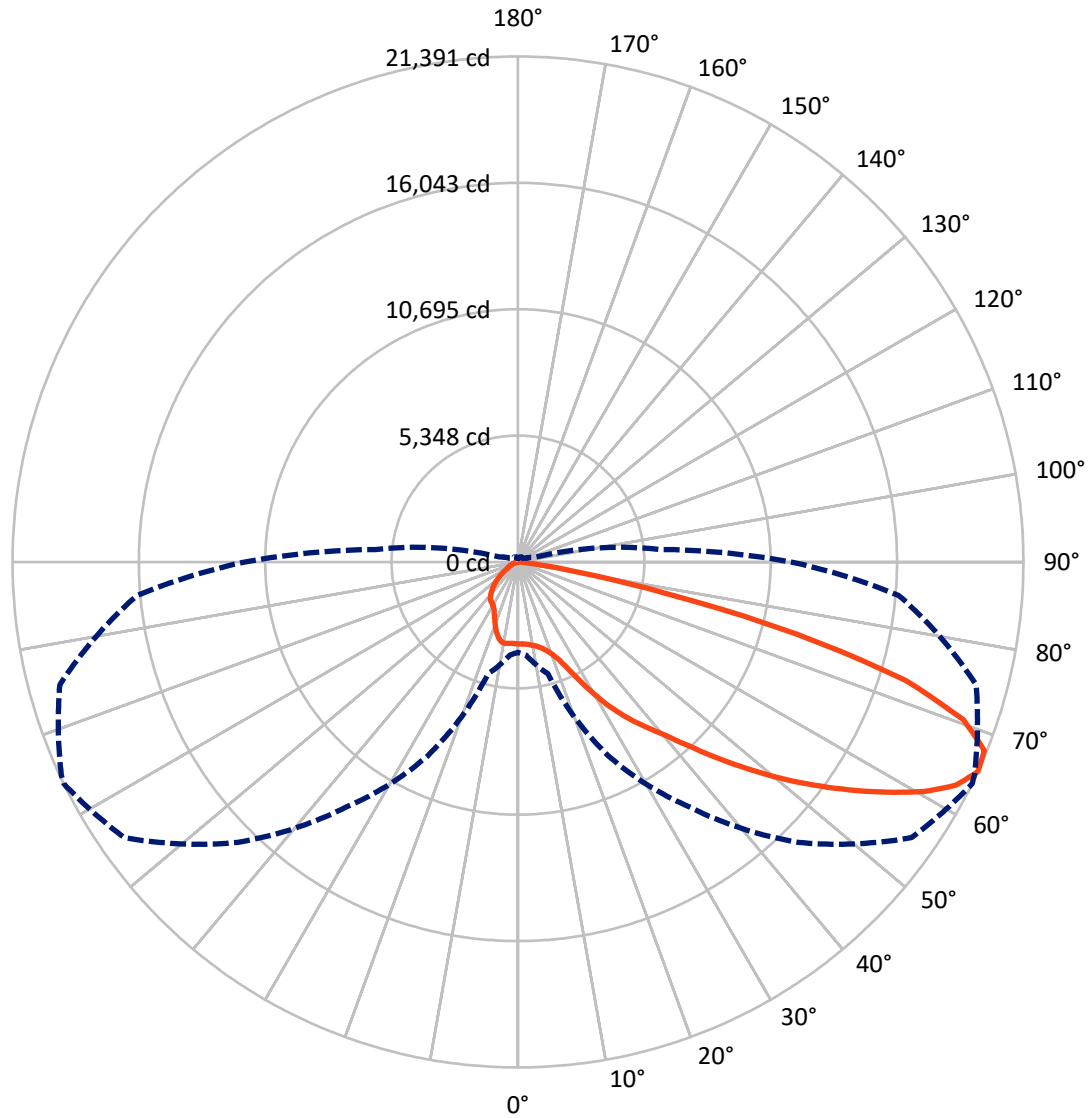
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 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	3985.7	0.0	3985.7
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	25818.3	0.0	25818.3
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	29804.0	0.0	29804.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	319.8	1.1
10°-20°	867.4	2.9
20°-30°	1643.7	5.5
30°-40°	3326.1	11.2
40°-50°	5666.1	19.0
50°-60°	7705.5	25.9
60°-70°	7235.8	24.3
70°-80°	2899.0	9.7
80°-90°	140.5	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°	29804.0	100.0
0°-180°	29804.0	100.0

**Coefficient of Utilization**



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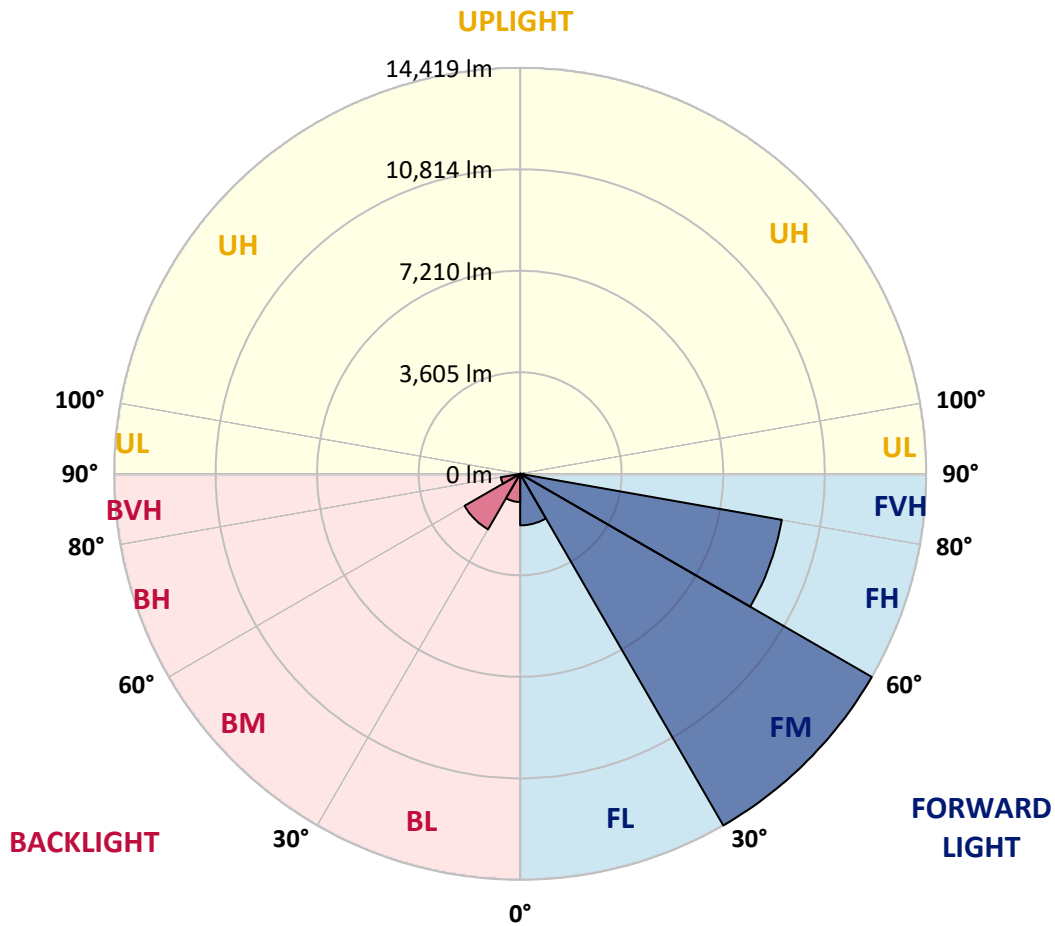
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1830.3	6.1			
FM (30°-60°)	14419.1	48.4			
FH (60°-80°)	9435.3	31.7			G4/12000
FVH (80°-90°)	133.6	0.4			G2/225
BL (0°-30°)	1000.7	3.4	B3/2500		
BM (30°-60°)	2278.6	7.6	B2/2500		
BH (60°-80°)	699.6	2.3	B2/1000		G2/1000
BVH (80°-90°)	6.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3466.5	3466.5	3466.5	3466.5	3466.5	3466.5	3466.5	3466.5	3466.5	3466.5	3466.5
2.5°	3454.5	3478.5	3472.5	3466.5	3464.5	3468.5	3470.5	3468.5	3468.5	3468.5	3470.5
5°	3388.6	3408.6	3408.6	3422.6	3442.5	3466.5	3484.5	3488.5	3492.5	3498.5	3496.5
7.5°	3262.7	3278.7	3290.7	3336.6	3386.6	3450.5	3504.5	3532.4	3536.4	3558.4	3566.4
10°	3176.8	3196.8	3216.8	3264.7	3336.6	3432.5	3524.5	3592.4	3602.4	3654.3	3678.3
12.5°	3172.8	3192.8	3218.8	3270.7	3354.6	3456.5	3568.4	3666.3	3684.3	3760.2	3810.2
15°	3214.8	3238.7	3262.7	3326.7	3416.6	3540.4	3660.3	3782.2	3800.2	3908.1	3962.0
17.5°	3300.7	3332.6	3350.6	3414.6	3510.5	3648.3	3806.2	3946.0	3962.0	4087.9	4155.8
20°	3470.5	3508.5	3514.5	3566.4	3660.3	3808.2	3996.0	4169.8	4189.8	4333.6	4409.6
22.5°	3822.2	3876.1	3828.2	3854.1	3938.0	4085.9	4289.7	4509.5	4537.4	4701.3	4769.2
25°	4441.5	4517.5	4393.6	4349.6	4385.6	4539.4	4795.2	5072.9	5104.9	5236.7	5270.7
27.5°	5658.3	5560.4	5372.6	5188.8	5080.9	5168.8	5456.5	5800.2	5840.1	5968.0	5928.0
30°	6995.0	6909.1	6655.3	6247.7	5992.0	5978.0	6243.7	6627.3	6673.3	6795.2	6673.3
32.5°	8333.6	8251.7	7976.0	7474.5	7030.9	6811.2	6995.0	7420.5	7444.5	7522.4	7342.6
35°	9650.3	9566.4	9290.7	8777.2	8231.7	7732.2	7696.3	8175.8	8183.8	8265.7	7998.0
37.5°	10975.0	10905.0	10611.3	10107.8	9570.4	8881.1	8547.4	8891.1	8901.1	8981.0	8703.2
40°	11920.0	11950.0	11748.2	11358.6	10897.0	10143.8	9502.4	9652.3	9592.4	9726.2	9560.4
42.5°	12731.2	12791.1	12615.3	12419.5	12151.8	11488.4	10685.3	10659.3	10563.4	10635.3	10463.5
45°	13432.5	13482.4	13324.6	13278.6	13272.7	12807.1	11978.0	11822.1	11688.2	11674.3	11468.5
47.5°	13690.2	13786.1	13854.1	14007.9	14307.6	14111.8	13314.6	13072.9	12923.0	12813.1	12487.4
50°	13788.1	13890.0	14121.8	14569.4	15278.6	15362.6	14645.3	14373.5	14189.7	13989.9	13510.4
52.5°	13656.3	13838.1	14149.8	14903.0	15932.0	16365.5	15922.0	15684.2	15474.4	15148.8	14437.5
55°	12879.1	13060.9	13698.2	14899.0	16257.7	17068.8	17128.8	17022.9	16787.1	16273.6	15186.7
57.5°	11240.7	11510.4	12519.4	14391.5	16251.7	17674.2	18311.6	18387.5	18123.8	17388.5	15776.1
60°	8971.0	9336.6	10567.4	13266.7	15750.2	18001.9	19348.5	19728.2	19448.4	18487.4	16253.7
62.5°	6259.7	6683.3	7848.1	11504.4	14603.3	17766.1	20105.8	20807.1	20595.3	19470.4	16437.5
65°	3818.2	3954.0	4893.1	9052.9	12653.3	16779.1	20339.6	21390.5	21320.6	20071.8	16165.7
67.5°	2543.4	2657.3	2927.1	6207.8	9822.1	14807.1	19780.1	21288.6	21308.6	19973.9	15170.7
70°	1532.5	1630.4	1806.2	3610.4	6365.6	11720.2	18047.9	19989.9	20105.8	18665.2	13284.6
72.5°	631.4	697.3	857.1	1636.4	3296.7	7438.5	14371.6	17162.7	17432.5	15694.2	10195.7
75°	357.6	391.6	503.5	821.2	1430.6	3466.5	8705.2	12183.8	12581.4	10817.1	6133.8
77.5°	237.8	253.7	325.7	531.5	805.2	1182.8	3720.3	6347.6	7106.9	5908.1	2655.3
80°	159.8	173.8	223.8	355.6	523.5	507.5	1184.8	2351.6	2893.1	2030.0	647.3
82.5°	107.9	109.9	159.8	233.8	331.7	245.8	349.6	731.3	919.1	587.4	245.8
85°	61.9	59.9	117.9	135.9	147.9	101.9	105.9	219.8	287.7	247.8	139.9
87.5°	8.0	12.0	46.0	36.0	20.0	22.0	22.0	38.0	55.9	59.9	30.0
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°	3466.5	3466.5	3466.5	3466.5	3466.5	3466.5	3466.5	3466.5	3466.5	3466.5	3466.5
2.5°	3470.5	3468.5	3462.5	3456.5	3442.5	3434.5	3438.5	3434.5	3432.5	3434.5	3442.5
5°	3496.5	3490.5	3474.5	3454.5	3426.6	3392.6	3370.6	3338.6	3308.7	3290.7	3294.7
7.5°	3566.4	3560.4	3538.4	3482.5	3392.6	3250.7	3120.9	3007.0	2921.1	2871.1	2873.1
10°	3678.3	3668.3	3634.3	3510.5	3274.7	2965.0	2707.3	2493.5	2353.6	2287.7	2281.7
12.5°	3810.2	3798.2	3738.2	3484.5	3050.9	2567.4	2211.8	1974.0	1844.1	1786.2	1780.2
15°	3966.0	3950.0	3832.1	3360.6	2725.3	2127.9	1802.2	1624.4	1540.5	1488.5	1490.5
17.5°	4159.8	4131.8	3902.1	3174.8	2371.6	1792.2	1550.4	1416.6	1342.7	1292.7	1288.7
20°	4411.6	4365.6	3958.0	2953.0	2045.9	1580.4	1380.6	1268.7	1212.8	1168.8	1160.8
22.5°	4763.2	4697.3	4026.0	2713.3	1816.2	1434.6	1254.7	1172.8	1126.9	1076.9	1068.9
25°	5198.8	5120.9	4109.9	2491.5	1658.3	1308.7	1162.8	1094.9	1041.0	983.0	977.0
27.5°	5808.2	5668.3	4209.8	2309.7	1522.5	1200.8	1078.9	1003.0	941.1	893.1	883.1
30°	6487.5	6257.7	4297.7	2199.8	1398.6	1100.9	969.0	893.1	835.2	801.2	795.2
32.5°	7130.8	6819.1	4355.6	2151.8	1286.7	987.0	849.1	767.2	723.3	713.3	719.3
35°	7738.2	7326.6	4349.6	2105.9	1186.8	873.1	731.3	647.3	613.4	619.4	619.4
37.5°	8437.5	7868.1	4307.7	2034.0	1104.9	769.2	629.4	555.4	525.5	527.5	535.5
40°	9250.7	8493.5	4281.7	1898.1	1015.0	673.3	545.5	485.5	463.5	455.5	453.5
42.5°	10117.8	9098.9	4285.7	1744.2	903.1	587.4	487.5	437.6	417.6	411.6	409.6
45°	10989.0	9676.3	4291.7	1584.4	785.2	521.5	445.6	403.6	391.6	383.6	383.6
47.5°	11808.1	10167.8	4179.8	1412.6	669.3	471.5	411.6	383.6	373.6	363.6	363.6
50°	12571.4	10495.4	3910.1	1212.8	577.4	431.6	385.6	365.6	355.6	345.7	345.7
52.5°	13164.8	10547.4	3464.5	1007.0	513.5	401.6	369.6	351.6	339.7	329.7	327.7
55°	13428.5	10221.7	2831.2	815.2	463.5	375.6	353.6	335.7	321.7	311.7	309.7
57.5°	13360.6	9536.4	2207.8	655.3	415.6	349.6	333.7	321.7	305.7	289.7	287.7
60°	13026.9	8619.3	1664.3	545.5	371.6	321.7	311.7	301.7	279.7	255.7	251.7
62.5°	12449.5	7466.5	1186.8	451.5	323.7	289.7	285.7	277.7	245.8	201.8	197.8
65°	11566.4	6065.9	799.2	375.6	277.7	253.7	255.7	241.8	199.8	149.8	145.9
67.5°	10275.7	4435.5	511.5	307.7	231.8	211.8	213.8	205.8	169.8	127.9	121.9
70°	8631.3	2937.0	333.7	233.8	185.8	163.8	175.8	177.8	143.9	103.9	99.9
72.5°	6327.6	1734.3	233.8	173.8	135.9	113.9	143.9	147.9	115.9	77.9	73.9
75°	3606.4	823.2	175.8	125.9	83.9	79.9	111.9	111.9	79.9	51.9	48.0
77.5°	1514.5	343.7	123.9	81.9	48.0	46.0	75.9	69.9	40.0	24.0	24.0
80°	437.6	153.8	65.9	40.0	20.0	18.0	30.0	22.0	10.0	4.0	4.0
82.5°	171.8	67.9	26.0	16.0	8.0	8.0	4.0	0.0	0.0	0.0	0.0
85°	101.9	28.0	12.0	6.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	26.0	6.0	4.0	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)