

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: P967916

Luminaire Tested: **NAV-SB5A-835-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967916
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-835-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18239.9 lumens
Efficiency: N/A
Efficacy: 128.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

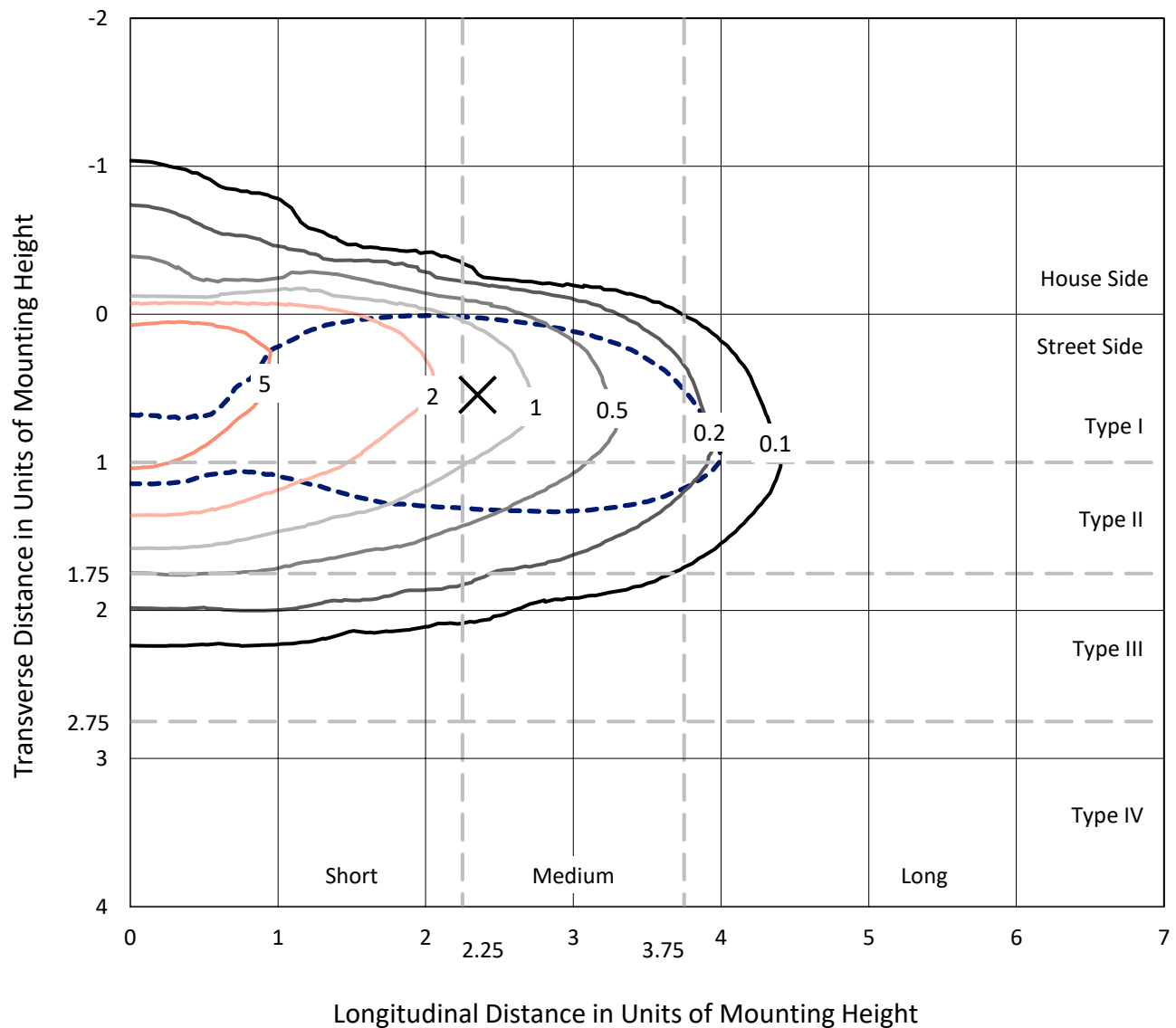


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Iso-Footcandle Lines of Horizontal Illumination

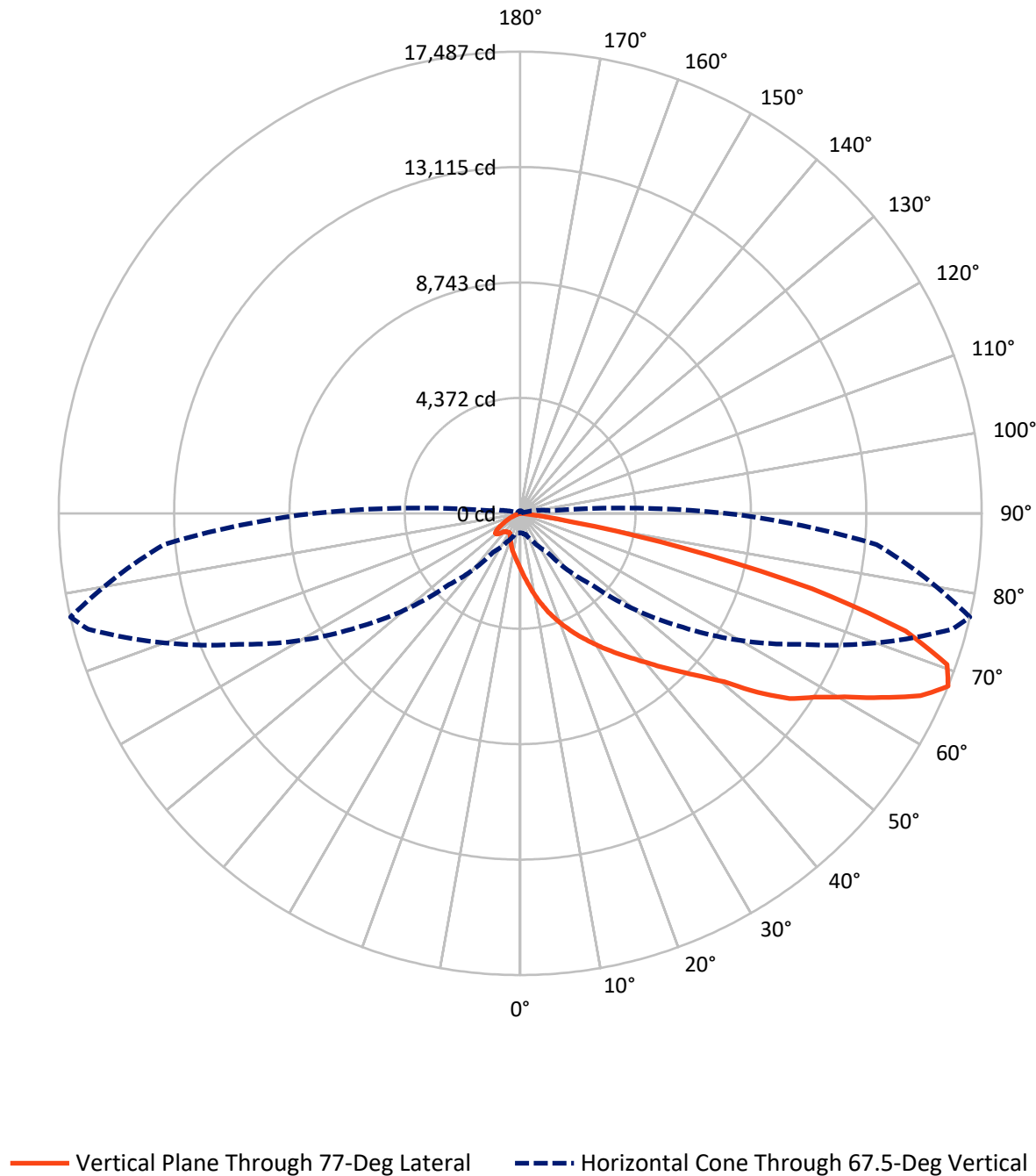
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1341.9	0.0	1341.9
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	16898.0	0.0	16898.0
	% Fixture	92.6	0.0	92.6
Total	Lumens	18239.9	0.0	18239.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.7	1.2
10°-20°	751.8	4.1
20°-30°	1450.7	8.0
30°-40°	2518.5	13.8
40°-50°	3656.8	20.0
50°-60°	4199.4	23.0
60°-70°	3645.8	20.0
70°-80°	1717.2	9.4
80°-90°	84.9	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°	18239.9	100.0
0°-180°	18239.9	100.0

Coefficient of Utilization



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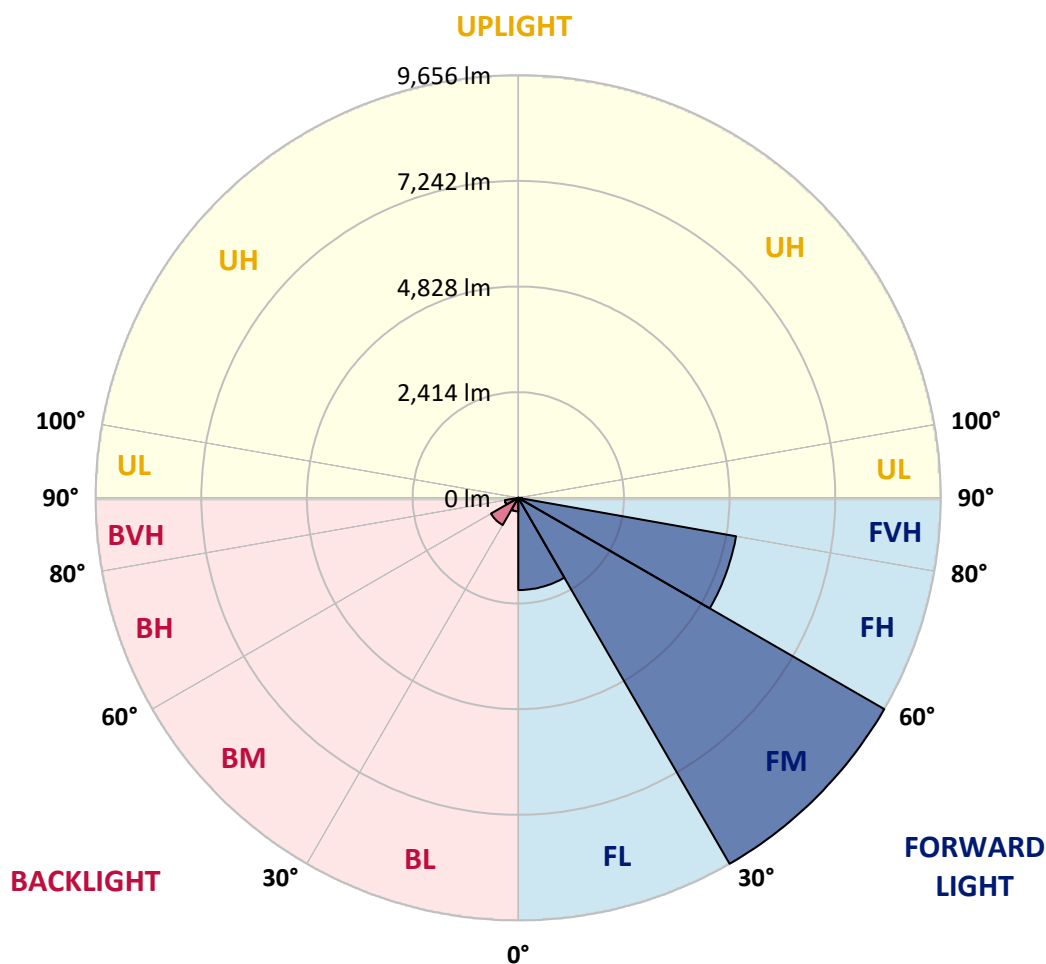
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2106.5	11.5			
FM	(30°-60°)	9655.7	52.9			
FH	(60°-80°)	5052.4	27.7			G3/7500
FVH	(80°-90°)	83.4	0.5			G1/100
BL	(0°-30°)	310.7	1.7	B1/500		
BM	(30°-60°)	719.0	3.9	B1/1000		
BH	(60°-80°)	310.7	1.7	B1/500		G1/500
BVH	(80°-90°)	1.6	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-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2103.3	2103.3	2103.3	2103.3	2103.3	2103.3	2103.3	2103.3	2103.3	2103.3	2103.3
2.5°	2912.0	2930.2	2904.1	2854.3	2779.5	2730.8	2611.9	2499.8	2375.1	2335.6	2210.9
5°	3549.7	3565.6	3536.1	3481.7	3382.1	3287.0	3130.7	2896.1	2652.7	2574.5	2353.6
7.5°	4022.0	4031.1	4019.7	3969.9	3874.8	3767.2	3592.7	3315.3	2953.9	2867.8	2529.2
10°	4361.8	4391.3	4387.9	4368.7	4305.2	4218.0	4032.2	3716.2	3291.5	3180.5	2727.4
12.5°	4587.2	4620.1	4639.4	4682.4	4678.9	4623.5	4460.4	4126.2	3627.9	3497.6	2950.6
15°	4652.9	4688.0	4761.6	4861.4	4949.6	4978.0	4863.6	4528.3	3998.2	3831.8	3179.3
17.5°	4615.6	4669.9	4758.3	4915.7	5109.4	5237.3	5224.9	4916.8	4334.6	4144.4	3403.6
20°	4698.2	4750.4	4819.4	4952.0	5177.4	5409.5	5502.4	5288.3	4668.8	4469.4	3639.2
22.5°	5155.9	5146.7	5153.5	5175.0	5309.8	5539.8	5731.2	5625.8	4999.5	4795.7	3888.3
25°	5880.7	5839.9	5770.9	5654.2	5620.2	5731.2	5930.5	5924.9	5348.3	5129.7	4143.3
27.5°	6712.1	6705.2	6543.3	6262.4	6103.9	6060.8	6155.9	6216.0	5693.8	5460.5	4399.2
30°	7508.3	7526.5	7307.8	6995.2	6704.1	6535.4	6449.3	6492.3	6044.9	5817.3	4663.1
32.5°	8201.5	8220.7	7982.9	7617.1	7256.9	7053.0	6871.8	6765.3	6427.8	6179.7	4953.1
35°	8787.1	8806.3	8533.3	8129.0	7745.0	7560.4	7355.4	7064.3	6812.9	6581.8	5275.9
37.5°	9310.4	9304.7	8938.8	8531.1	8154.0	8007.8	7900.2	7432.5	7209.3	6986.2	5633.8
40°	9619.5	9643.4	9330.8	8881.1	8515.3	8408.8	8402.0	7888.9	7666.9	7450.5	6025.7
42.5°	9710.2	9752.1	9525.5	9156.3	8824.4	8708.9	8886.8	8382.8	8199.3	7988.5	6468.6
45°	9547.1	9587.8	9484.8	9228.8	9035.2	8960.3	9303.5	8894.6	8767.8	8559.4	6968.1
47.5°	9071.4	9122.3	9147.3	9092.9	9090.6	9166.5	9677.3	9433.8	9442.9	9229.9	7546.9
50°	8150.5	8236.6	8465.4	8658.0	8955.8	9329.7	10040.9	10018.2	10204.0	10020.5	8301.2
52.5°	6476.5	6598.8	7387.2	7913.8	8583.2	9299.0	10440.8	10956.1	11539.4	11271.0	9364.7
55°	5204.5	5204.5	5845.6	6831.0	7856.0	9097.4	10615.2	11565.5	12448.9	12385.5	10113.4
57.5°	4242.9	4293.8	4702.7	5573.7	6803.8	8617.2	10722.7	11948.3	13181.7	13135.3	10845.1
60°	2618.7	2728.5	3501.0	4360.7	5606.6	7762.0	10654.8	12335.7	14070.9	14108.2	11726.3
62.5°	1474.7	1515.5	1859.8	3137.4	4359.5	6612.4	10134.9	12551.9	15208.0	15366.6	12634.7
65°	1018.2	1038.6	1171.2	1952.7	3021.9	5264.5	9118.9	12417.3	16347.5	16668.0	13404.8
67.5°	739.6	749.8	832.5	1192.7	1792.9	3817.0	7526.5	11737.6	16951.2	17486.9	13552.1
70°	568.6	575.4	635.4	783.8	1059.0	2355.9	5466.1	10386.3	16514.0	17154.0	12797.7
72.5°	462.1	468.9	515.4	579.9	702.2	1393.2	3313.0	8434.8	14584.0	15274.9	10894.9
75°	389.6	398.7	440.6	482.5	550.4	894.8	1554.0	5873.9	10967.4	11420.4	7576.3
77.5°	216.4	199.4	357.9	399.9	464.4	566.3	727.1	3456.8	6142.3	6268.1	3361.7
80°	134.8	139.3	284.3	321.6	356.8	285.5	333.0	1330.9	2129.3	2022.9	651.3
82.5°	7.9	18.1	218.6	232.2	244.7	122.3	125.8	451.9	513.1	471.2	115.5
85°	0.0	0.0	99.6	80.5	85.0	35.2	36.3	105.4	69.1	74.7	22.7
87.5°	0.0	0.0	0.0	2.3	0.0	3.4	6.8	9.0	3.4	4.5	7.9
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°	2103.3	2103.3	2103.3	2103.3	2103.3	2103.3	2103.3	2103.3	2103.3	2103.3	2103.3
2.5°	2131.7	2052.4	1891.5	1734.1	1606.1	1487.2	1402.2	1321.8	1281.0	1278.8	1276.5
5°	2196.2	2029.7	1708.1	1423.7	1194.9	1011.5	892.6	807.6	764.5	749.8	747.5
7.5°	2286.8	2036.5	1547.2	1151.9	882.3	724.9	656.9	629.8	620.7	610.5	608.2
10°	2401.2	2052.4	1403.3	927.6	695.5	616.1	589.0	577.7	570.8	564.1	561.8
12.5°	2529.2	2067.1	1260.6	770.2	611.6	570.8	551.6	538.0	528.9	521.0	518.8
15°	2653.8	2076.1	1112.2	660.3	568.6	535.8	515.4	500.6	488.2	479.1	478.0
17.5°	2777.2	2088.6	972.9	594.6	533.5	500.6	480.2	462.1	451.9	441.8	440.6
20°	2914.3	2086.3	841.5	548.2	498.4	465.6	444.0	427.0	416.8	405.5	404.4
22.5°	3041.2	2075.0	726.0	508.6	462.1	430.4	406.6	389.6	379.5	370.3	369.2
25°	3187.2	2066.0	629.8	472.3	428.1	396.5	370.3	354.5	343.2	335.3	334.2
27.5°	3327.8	2052.4	559.5	439.4	395.3	364.7	339.8	321.6	311.5	305.9	305.9
30°	3465.9	2049.0	533.5	407.7	365.8	335.3	310.4	293.4	285.5	283.2	282.1
32.5°	3632.4	2058.0	544.8	396.5	338.7	308.1	284.3	271.8	263.9	263.9	263.9
35°	3810.2	2055.7	561.8	406.6	320.5	280.8	262.8	254.8	246.9	246.9	246.9
37.5°	4033.4	2059.1	575.4	423.6	313.8	258.2	248.0	237.9	233.3	233.3	233.3
40°	4366.4	2171.3	568.6	438.3	311.5	242.4	222.0	218.6	215.2	215.2	215.2
42.5°	4774.1	2414.8	577.7	439.4	310.4	231.0	203.9	210.6	202.7	201.6	200.5
45°	5220.3	2681.0	635.4	415.6	309.2	225.4	194.9	202.7	190.2	190.2	190.2
47.5°	5663.2	2944.9	694.3	381.7	305.9	224.3	186.9	182.3	179.0	180.1	180.1
50°	6273.7	3160.1	717.0	335.3	297.9	222.0	172.2	173.3	171.1	173.3	173.3
52.5°	6938.6	3205.4	689.8	283.2	275.2	215.2	162.0	166.5	165.3	167.6	167.6
55°	7353.1	3156.7	569.7	235.5	240.2	188.0	151.8	160.8	160.8	160.8	160.8
57.5°	7781.3	2949.4	404.4	191.4	199.4	154.1	142.7	155.2	154.1	152.9	152.9
60°	8089.4	2614.2	266.2	157.4	158.6	126.9	132.5	146.1	144.9	139.3	139.3
62.5°	8319.3	2243.7	171.1	133.7	121.2	114.4	121.2	132.5	128.0	115.5	113.3
65°	8293.3	1730.7	131.4	114.4	99.6	99.6	105.4	115.5	102.0	81.6	79.3
67.5°	7809.6	1171.2	108.8	96.2	83.8	82.7	87.2	96.2	87.2	69.1	66.8
70°	6945.4	765.7	87.2	74.7	66.8	61.2	70.2	82.7	73.6	55.5	53.2
72.5°	5637.2	466.7	65.7	54.3	48.7	39.7	55.5	68.0	58.9	40.8	38.5
75°	3647.2	237.9	45.3	35.2	26.0	23.8	40.8	50.9	40.8	24.9	21.5
77.5°	1395.4	99.6	24.9	15.9	13.6	11.4	22.7	30.5	17.0	5.6	4.5
80°	268.4	41.9	12.5	7.9	6.8	4.5	3.4	2.3	0.0	0.0	0.0
82.5°	46.4	13.6	4.5	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.9	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.6	0.0	0.0	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)