

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: P966837

Luminaire Tested: **NAV-SB4C-830-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966837
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-830-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23014.3 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

Input Watts (W): 200.7
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



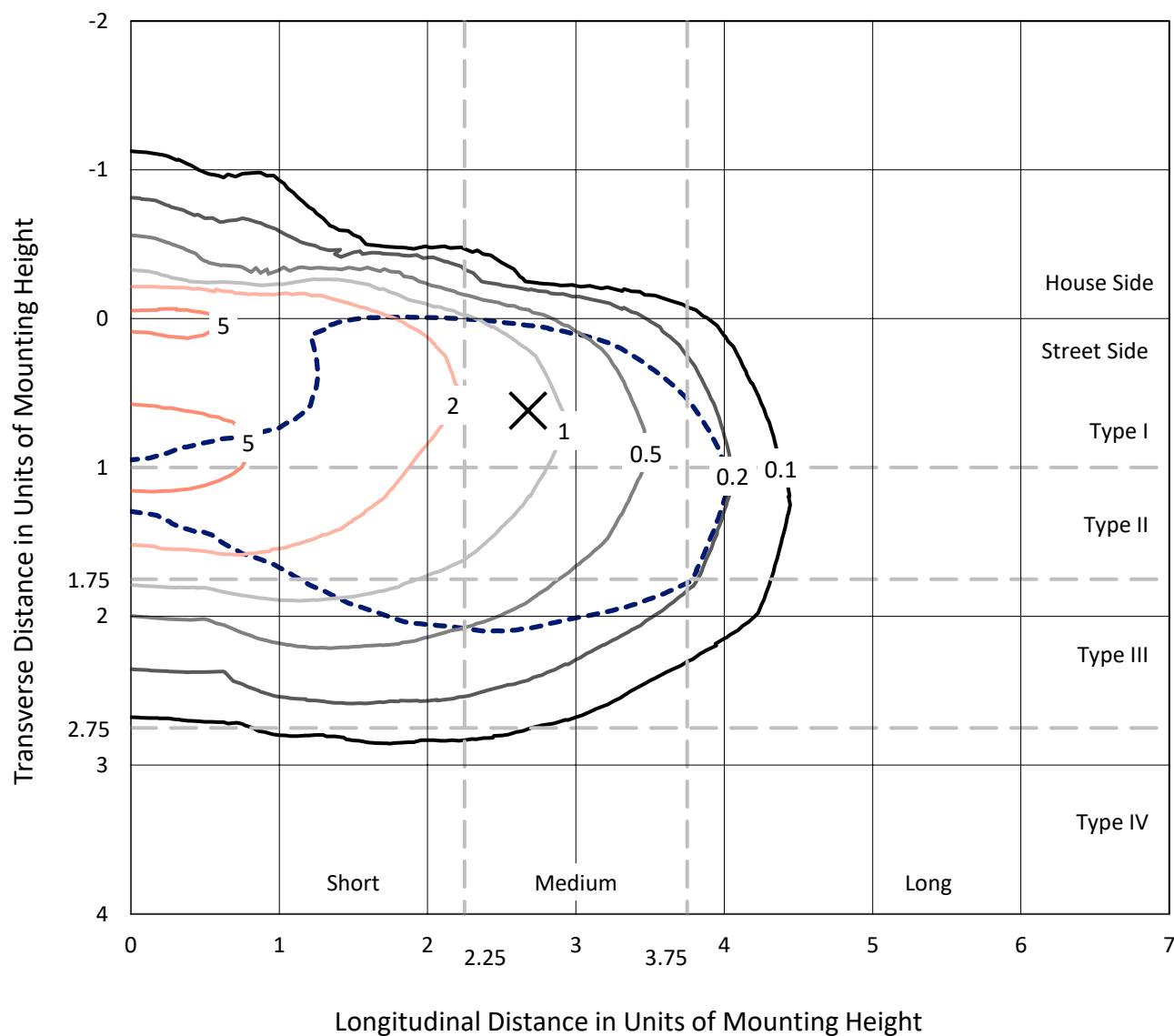
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

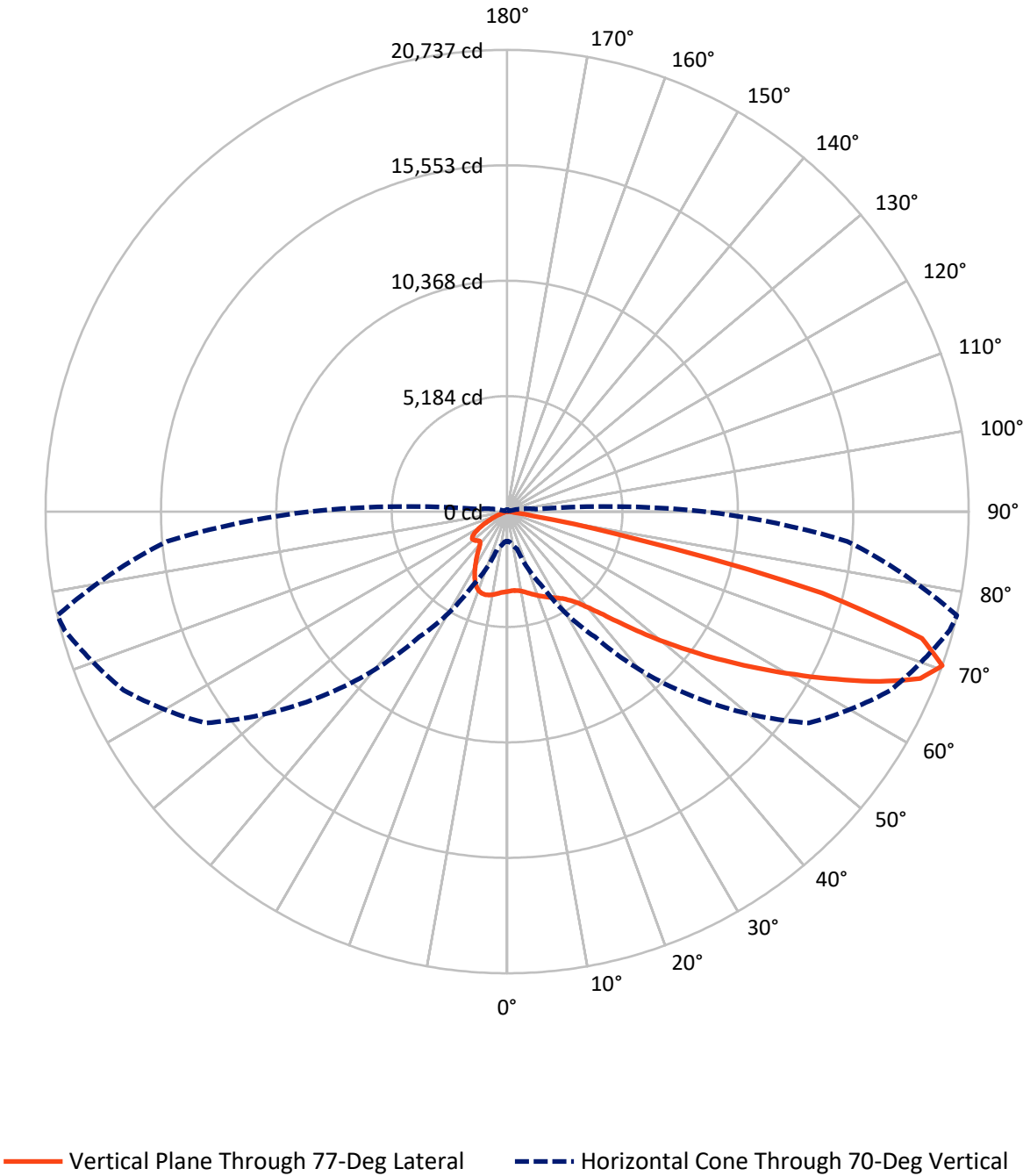
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2426.0	0.0	2426.0
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	20588.3	0.0	20588.3
	% Fixture	89.5	0.0	89.5
Total	Lumens	23014.3	0.0	23014.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.4	1.3
10°-20°	734.4	3.2
20°-30°	1136.0	4.9
30°-40°	2061.3	9.0
40°-50°	3891.0	16.9
50°-60°	5622.1	24.4
60°-70°	5984.6	26.0
70°-80°	3171.4	13.8
80°-90°	104.1	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°	23014.3	100.0
0°-180°	23014.3	100.0

Coefficient of Utilization



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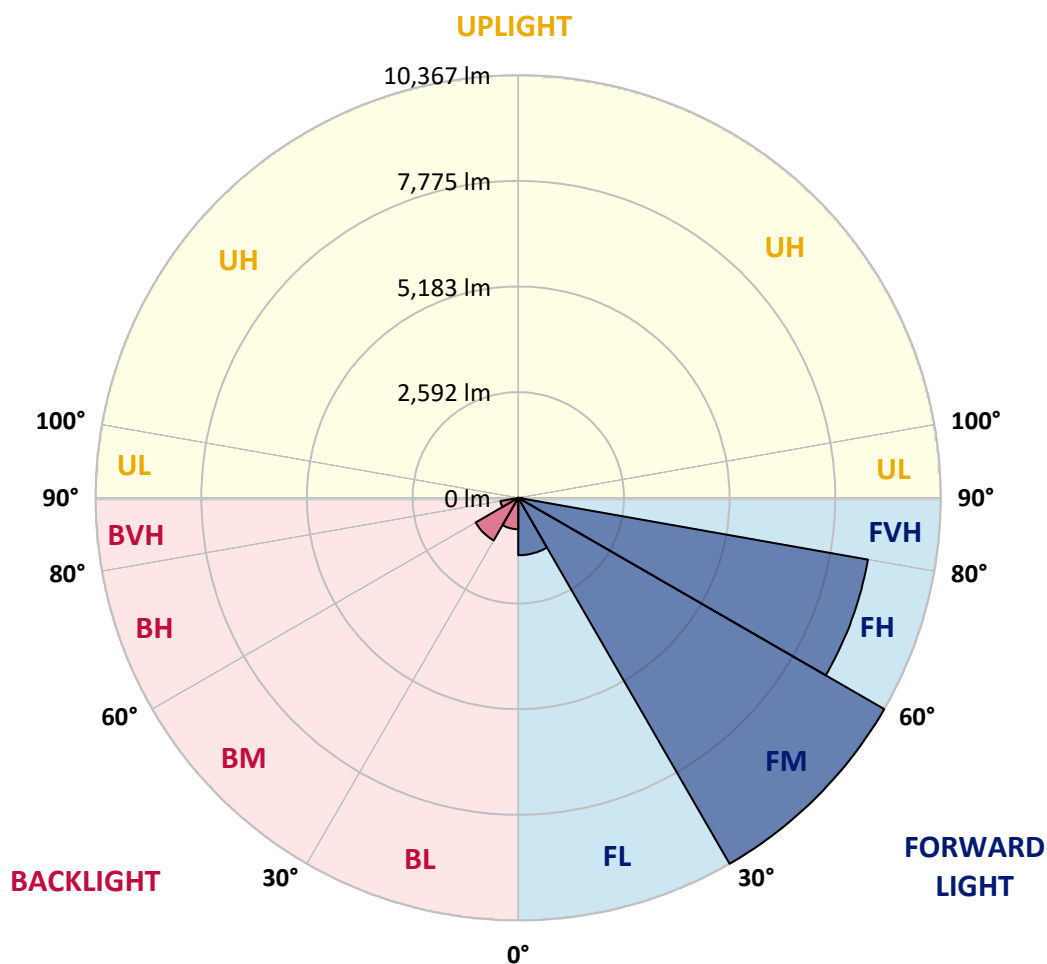
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1409.0	6.1			
FM	(30°-60°)	10366.7	45.0			
FH	(60°-80°)	8711.2	37.9			G4/12000
FVH	(80°-90°)	101.3	0.4			G2/225
BL	(0°-30°)	770.8	3.3	B2/1000		
BM	(30°-60°)	1207.7	5.2	B2/2500		
BH	(60°-80°)	444.8	1.9	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: B2-U0-G4

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3589.9	3589.9	3589.9	3589.9	3589.9	3589.9	3589.9	3589.9	3589.9	3589.9	3589.9
2.5°	3370.4	3400.8	3396.5	3416.8	3424.1	3453.2	3482.2	3521.5	3565.2	3563.6	3592.7
5°	3180.0	3210.5	3217.8	3245.4	3280.2	3325.3	3384.9	3463.4	3544.8	3557.9	3616.0
7.5°	2954.7	2986.6	3005.6	3060.8	3124.7	3217.8	3315.2	3430.0	3565.2	3584.0	3695.9
10°	2729.5	2758.5	2783.2	2861.7	2963.4	3101.4	3259.9	3425.6	3607.3	3634.9	3793.3
12.5°	2589.9	2617.5	2645.1	2713.5	2839.9	3008.5	3223.5	3445.9	3677.0	3716.2	3925.5
15°	2540.5	2565.2	2587.0	2648.1	2765.8	2957.6	3216.3	3488.1	3765.6	3818.0	4085.4
17.5°	2547.7	2560.9	2575.4	2621.8	2736.6	2934.4	3229.4	3560.7	3870.3	3916.8	4245.2
20°	2589.9	2597.1	2598.6	2630.6	2732.3	2931.4	3255.5	3630.6	3969.1	4031.6	4403.7
22.5°	2643.7	2646.5	2643.7	2665.5	2759.9	2953.2	3290.5	3714.8	4079.6	4137.7	4563.6
25°	2895.1	2839.9	2770.2	2727.9	2806.4	2995.4	3342.7	3828.2	4200.2	4256.9	4719.1
27.5°	3675.5	3517.2	3267.2	2986.6	2902.4	3056.4	3415.4	3943.0	4322.3	4373.2	4886.2
30°	4942.9	4735.1	4310.7	3678.5	3210.5	3184.4	3509.9	4057.8	4451.7	4506.9	5065.0
32.5°	6213.1	6162.3	5672.5	4797.6	3903.7	3469.2	3666.8	4213.4	4623.2	4666.7	5306.2
35°	7497.9	7394.8	6993.6	6128.9	4972.0	4049.1	3928.4	4416.8	4848.5	4897.9	5658.0
37.5°	8481.9	8419.3	8170.8	7458.7	6239.3	4944.4	4376.1	4732.1	5175.4	5230.7	6108.5
40°	9351.0	9321.9	9237.6	8768.2	7656.3	6115.8	5072.2	5220.5	5628.9	5694.3	6660.8
42.5°	10034.0	10102.4	10150.4	10019.5	9117.0	7452.9	6008.2	5906.5	6261.1	6327.9	7364.2
45°	10733.1	10756.3	10949.7	11138.6	10567.4	8851.0	7063.4	6710.2	7047.4	7130.2	8207.2
47.5°	11182.2	11275.2	11615.3	11948.1	11786.8	10237.5	8197.0	7659.2	7958.6	8114.1	9151.8
50°	11215.7	11391.5	11859.5	12439.4	12674.8	11557.2	9429.5	8740.6	9058.8	9230.3	10160.5
52.5°	10659.0	10932.2	11657.4	12506.2	13154.4	12674.8	10704.1	9821.9	10230.2	10454.1	11206.9
55°	8172.3	8529.8	10897.4	12142.9	13173.3	13522.1	11945.2	10948.2	11535.3	11788.2	12337.6
57.5°	7120.1	7300.3	8567.6	11512.1	12823.1	13863.6	13067.2	12020.8	12955.3	13269.2	13405.9
60°	5923.9	6160.9	7185.5	10480.2	12347.8	13897.2	14058.4	13404.4	14494.4	14847.6	14385.5
62.5°	4025.8	4283.1	5301.9	8707.2	11698.1	13881.2	14870.9	14828.7	16205.0	16584.4	15215.3
65°	2494.0	2655.3	3326.7	7109.9	10789.8	13898.6	15721.0	16558.3	18010.2	18395.3	15857.7
67.5°	1970.8	2044.9	2395.1	5458.8	9224.5	13506.1	16569.8	18184.5	19709.1	20014.4	16053.9
70°	1324.0	1369.1	1742.6	3659.6	6862.8	11695.2	16553.9	19001.3	20584.0	20736.7	15338.8
72.5°	697.6	732.5	1018.8	1694.6	4145.0	8313.3	13953.8	18024.6	19713.5	19483.8	13110.9
75°	348.8	406.9	686.0	860.4	1770.2	4636.3	8664.9	14211.0	15516.1	14626.6	8412.1
77.5°	264.6	319.7	566.8	566.8	616.2	1560.9	3669.7	7750.8	7149.1	5953.0	2469.2
80°	168.6	218.0	495.6	428.8	257.3	396.8	956.3	2171.4	1518.7	1155.4	449.1
82.5°	98.8	142.5	412.8	283.4	143.9	146.8	270.3	462.2	393.9	306.7	138.1
85°	39.3	93.0	283.4	111.9	56.7	36.3	81.4	98.8	81.4	61.1	34.8
87.5°	0.0	21.8	49.4	0.0	4.4	2.9	5.8	7.3	7.3	5.8	11.6
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°	3589.9	3589.9	3589.9	3589.9	3589.9	3589.9	3589.9	3589.9	3589.9	3589.9	3589.9
2.5°	3605.8	3608.7	3617.4	3618.9	3598.6	3572.3	3562.2	3557.9	3540.5	3538.9	3541.9
5°	3649.4	3662.5	3649.4	3611.6	3521.5	3395.1	3299.2	3220.7	3149.4	3127.7	3114.6
7.5°	3736.6	3749.7	3710.4	3562.2	3335.5	3084.0	2857.3	2697.5	2553.6	2499.8	2478.0
10°	3861.6	3879.0	3755.5	3456.1	3055.0	2651.0	2267.3	1996.9	1786.2	1700.5	1664.1
12.5°	4018.5	4025.8	3780.2	3294.8	2690.2	2113.2	1569.7	1280.4	1093.0	1023.2	1001.3
15°	4191.5	4181.4	3783.1	3075.3	2193.1	1494.0	1024.6	841.5	765.9	742.7	742.7
17.5°	4373.2	4331.0	3725.0	2758.5	1648.1	1021.7	760.1	716.5	703.5	697.6	696.2
20°	4551.9	4457.5	3618.9	2344.3	1183.1	763.0	690.3	677.3	670.0	667.1	664.2
22.5°	4714.7	4553.4	3437.2	1863.2	859.0	674.3	652.5	640.9	627.8	622.1	620.6
25°	4873.2	4608.6	3181.4	1414.1	687.5	630.8	613.4	591.5	574.1	566.8	564.0
27.5°	5027.2	4643.6	2861.7	1046.4	613.4	590.1	558.1	527.6	514.4	511.6	508.7
30°	5191.4	4655.1	2498.3	780.4	568.3	539.2	492.7	457.8	450.6	452.0	452.0
32.5°	5392.0	4672.6	2132.1	639.5	530.4	478.2	422.9	386.6	380.8	386.6	385.1
35°	5631.8	4707.4	1778.9	588.7	497.0	415.6	356.1	325.5	319.7	324.1	322.7
37.5°	5957.4	4764.1	1449.0	578.4	469.4	363.4	299.4	274.7	274.7	276.1	274.7
40°	6390.5	4915.3	1153.9	571.1	454.9	324.1	252.9	242.7	247.0	250.0	250.0
42.5°	6918.0	5236.5	954.9	562.4	438.9	306.7	229.6	225.3	232.6	235.4	235.4
45°	7509.6	5643.4	885.1	548.0	424.4	318.3	219.5	213.6	222.3	223.9	225.3
47.5°	8121.4	6041.7	876.4	532.0	409.9	335.7	216.6	203.5	213.6	215.1	216.6
50°	8740.6	6301.8	885.1	507.3	386.6	335.7	218.0	193.3	202.0	206.3	207.9
52.5°	9364.1	6421.0	879.2	453.5	345.9	315.4	218.0	184.6	193.3	196.2	196.2
55°	9968.6	6397.7	790.6	373.5	293.6	279.0	212.2	177.3	183.2	184.6	184.6
57.5°	10446.8	6073.6	626.4	290.7	238.3	232.6	193.3	168.6	172.9	171.5	171.5
60°	10696.8	5361.5	447.6	223.9	187.5	183.2	170.0	156.9	159.9	152.6	151.2
62.5°	10699.7	4419.7	299.4	177.3	149.6	145.3	145.3	140.9	138.1	123.5	119.2
65°	10471.5	3374.7	199.2	140.9	120.6	113.4	122.1	120.6	110.5	90.1	87.2
67.5°	9954.1	2212.1	151.2	110.5	93.0	88.7	97.4	101.8	94.5	75.5	74.1
70°	8890.2	1287.7	124.9	85.8	69.8	65.4	78.5	87.2	78.5	61.1	58.1
72.5°	7384.6	694.7	101.8	64.0	48.0	43.6	62.5	71.2	62.5	45.1	43.6
75°	4791.8	372.1	78.5	42.1	24.7	27.6	46.5	52.3	43.6	29.1	26.1
77.5°	1608.8	164.2	49.4	20.4	11.6	11.6	27.6	32.0	20.4	10.1	8.7
80°	359.0	68.3	20.4	8.7	4.4	4.4	5.8	5.8	2.9	0.0	0.0
82.5°	117.8	27.6	8.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	45.1	10.1	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	17.4	1.4	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)