

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: P968789

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968789
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
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: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30411.7 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 249.5
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

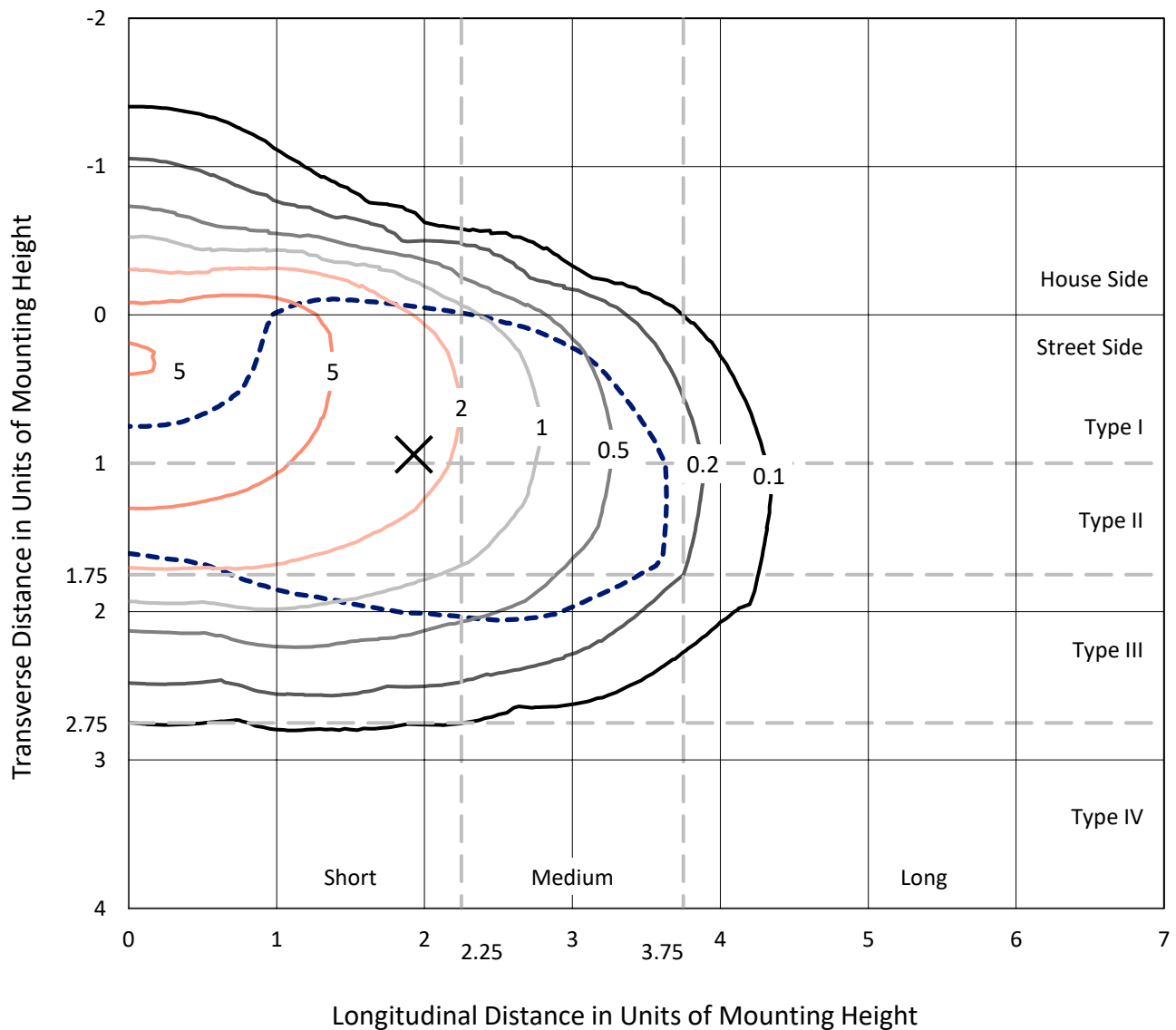


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

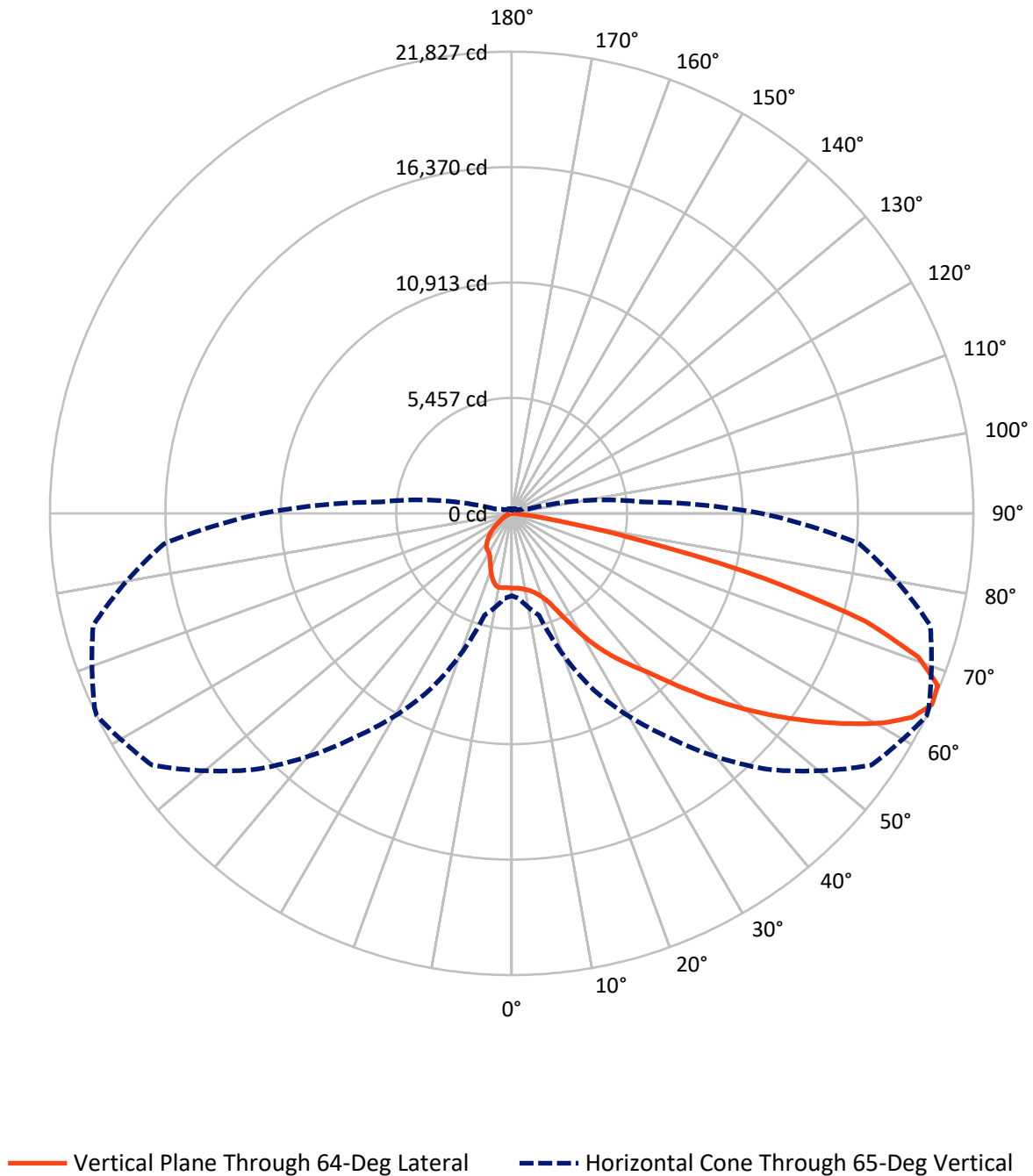


Based on 25 foot mounting height. Maximum calculated value = 8.9 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4067.0	0.0	4067.0
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	26344.8	0.0	26344.8
	% Fixture	86.6	0.0	86.6
Total	Lumens	30411.7	0.0	30411.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	326.3	1.1
10°-20°	885.1	2.9
20°-30°	1677.2	5.5
30°-40°	3394.0	11.2
40°-50°	5781.6	19.0
50°-60°	7862.6	25.9
60°-70°	7383.4	24.3
70°-80°	2958.1	9.7
80°-90°	143.3	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°	30411.7	100.0
0°-180°	30411.7	100.0

Coefficient of Utilization



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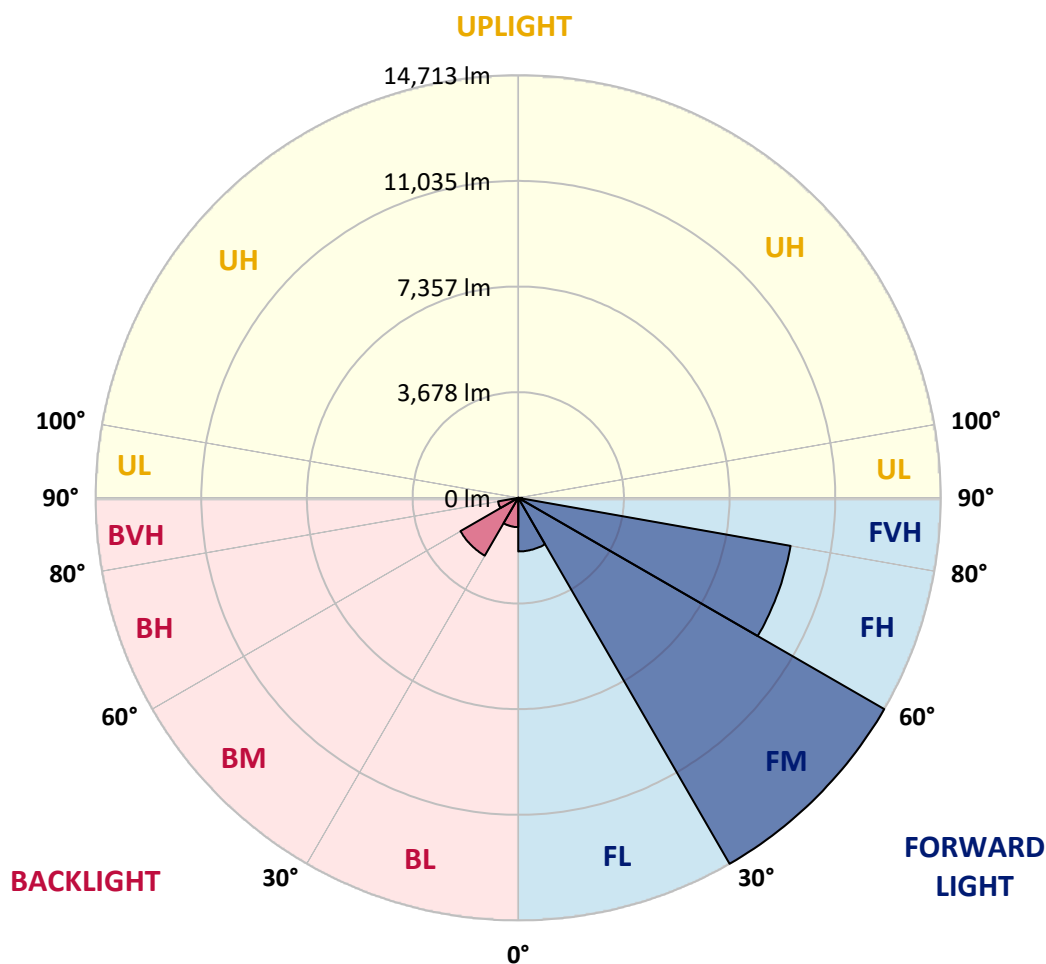
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1867.6	6.1			
FM	(30°-60°)	14713.2	48.4			
FH	(60°-80°)	9627.7	31.7			G4/12000
FVH	(80°-90°)	136.3	0.4			G2/225
BL	(0°-30°)	1021.1	3.4	B3/2500		
BM	(30°-60°)	2325.1	7.6	B2/2500		
BH	(60°-80°)	713.8	2.3	B2/1000		G2/1000
BVH	(80°-90°)	7.0	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°	3537.2	3537.2	3537.2	3537.2	3537.2	3537.2	3537.2	3537.2	3537.2	3537.2	3537.2
2.5°	3525.0	3549.5	3543.3	3537.2	3535.1	3539.2	3541.3	3539.2	3539.2	3539.2	3541.3
5°	3457.7	3478.0	3478.0	3492.4	3512.8	3537.2	3555.5	3559.6	3563.7	3569.9	3567.8
7.5°	3329.3	3345.6	3357.8	3404.6	3455.7	3520.9	3575.9	3604.5	3608.5	3631.0	3639.2
10°	3241.6	3262.0	3282.4	3331.2	3404.6	3502.5	3596.3	3665.6	3675.9	3728.8	3753.3
12.5°	3237.5	3257.9	3284.4	3337.4	3423.0	3527.0	3641.2	3741.0	3759.4	3836.9	3887.8
15°	3280.3	3304.8	3329.3	3394.5	3486.2	3612.6	3735.0	3859.3	3877.7	3987.8	4042.8
17.5°	3367.9	3400.6	3419.0	3484.2	3582.1	3722.7	3883.8	4026.5	4042.8	4171.2	4240.5
20°	3541.3	3580.0	3586.2	3639.2	3735.0	3885.8	4077.4	4254.9	4275.3	4422.1	4499.4
22.5°	3900.1	3955.2	3906.2	3932.7	4018.3	4169.2	4377.2	4601.4	4629.9	4797.1	4866.5
25°	4532.1	4609.5	4483.1	4438.4	4475.0	4632.0	4892.9	5176.4	5208.9	5343.5	5378.2
27.5°	5773.7	5673.8	5482.1	5294.6	5184.4	5274.2	5567.8	5918.5	5959.2	6089.7	6048.9
30°	7137.6	7050.0	6791.0	6375.1	6114.1	6099.9	6371.1	6762.4	6809.4	6933.7	6809.4
32.5°	8503.6	8420.0	8138.6	7626.9	7174.3	6950.0	7137.6	7571.9	7596.3	7675.8	7492.3
35°	9847.1	9761.5	9480.1	8956.1	8399.6	7889.9	7853.2	8342.5	8350.7	8434.2	8161.0
37.5°	11198.7	11127.4	10827.7	10314.0	9765.5	9062.1	8721.7	9072.4	9082.5	9164.1	8880.7
40°	12163.1	12193.7	11987.8	11590.2	11119.3	10350.7	9696.2	9849.1	9787.9	9924.6	9755.3
42.5°	12990.8	13051.9	12872.6	12672.8	12399.5	11722.7	10903.1	10876.7	10778.8	10852.2	10676.8
45°	13706.4	13757.3	13596.3	13549.4	13543.3	13068.2	12222.2	12063.2	11926.6	11912.3	11702.3
47.5°	13969.4	14067.3	14136.6	14293.5	14599.4	14399.6	13586.2	13339.5	13186.5	13074.4	12742.1
50°	14069.3	14173.3	14409.8	14866.4	15590.1	15675.8	14943.9	14666.6	14479.0	14275.2	13785.9
52.5°	13934.8	14120.3	14438.4	15206.9	16256.9	16699.3	16246.7	16004.0	15790.0	15457.7	14731.9
55°	13141.6	13327.2	13977.5	15202.8	16589.2	17416.9	17478.1	17370.0	17129.4	16605.5	15496.5
57.5°	11470.0	11745.2	12774.7	14685.0	16583.1	18034.7	18685.0	18762.4	18493.4	17743.1	16097.8
60°	9153.9	9527.0	10782.9	13537.2	16071.4	18369.0	19743.1	20130.5	19845.0	18864.4	16585.1
62.5°	6387.4	6819.5	8008.1	11739.0	14901.1	18128.5	20515.8	21231.3	21015.3	19867.5	16772.7
65°	3896.0	4034.6	4992.9	9237.5	12911.3	17121.3	20754.3	21826.7	21755.3	20481.1	16495.4
67.5°	2595.3	2711.5	2986.7	6334.3	10022.4	15109.0	20183.5	21722.7	21743.1	20381.2	15480.1
70°	1563.7	1663.6	1843.1	3684.0	6495.4	11959.2	18415.9	20397.5	20515.8	19045.8	13555.5
72.5°	644.2	711.6	874.6	1669.7	3363.9	7590.2	14664.6	17512.7	17788.0	16014.3	10403.6
75°	364.9	399.5	513.7	837.9	1459.7	3537.2	8882.8	12432.2	12837.9	11037.7	6259.0
77.5°	242.6	258.9	332.3	542.3	821.6	1206.9	3796.1	6477.1	7251.8	6028.5	2709.5
80°	163.1	177.3	228.4	362.8	534.1	517.8	1209.0	2399.6	2952.1	2071.3	660.5
82.5°	110.1	112.1	163.1	238.5	338.5	250.7	356.8	746.2	937.8	599.4	250.7
85°	63.2	61.2	120.3	138.7	150.9	103.9	108.0	224.3	293.6	252.8	142.7
87.5°	8.2	12.2	46.8	36.7	20.4	22.4	22.4	38.7	57.1	61.2	30.5
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°	3537.2	3537.2	3537.2	3537.2	3537.2	3537.2	3537.2	3537.2	3537.2	3537.2	3537.2
2.5°	3541.3	3539.2	3533.2	3527.0	3512.8	3504.6	3508.7	3504.6	3502.5	3504.6	3512.8
5°	3567.8	3561.7	3545.4	3525.0	3496.4	3461.7	3439.4	3406.7	3376.1	3357.8	3361.9
7.5°	3639.2	3633.0	3610.6	3553.5	3461.7	3317.0	3184.5	3068.3	2980.6	2929.7	2931.7
10°	3753.3	3743.1	3708.4	3582.1	3341.5	3025.5	2762.5	2544.4	2401.7	2334.3	2328.2
12.5°	3887.8	3875.6	3814.4	3555.5	3113.1	2619.8	2256.8	2014.2	1881.8	1822.7	1816.5
15°	4046.9	4030.6	3910.3	3429.1	2780.8	2171.3	1839.0	1657.5	1571.8	1518.8	1520.9
17.5°	4244.6	4216.1	3981.6	3239.5	2420.0	1828.7	1582.1	1445.5	1370.0	1319.1	1315.0
20°	4501.5	4454.6	4038.7	3013.3	2087.6	1612.6	1408.8	1294.6	1237.5	1192.7	1184.5
22.5°	4860.3	4793.1	4108.1	2768.6	1853.2	1463.8	1280.3	1196.7	1149.8	1098.9	1090.7
25°	5304.8	5225.2	4193.7	2542.3	1692.2	1335.4	1186.5	1117.2	1062.2	1003.1	996.9
27.5°	5926.5	5783.9	4295.6	2356.8	1553.5	1225.3	1101.0	1023.5	960.2	911.3	901.1
30°	6619.8	6385.3	4385.4	2244.6	1427.1	1123.3	988.8	911.3	852.2	817.5	811.4
32.5°	7276.3	6958.2	4444.4	2195.8	1312.9	1007.2	866.4	782.9	738.0	727.9	733.9
35°	7896.0	7476.0	4438.4	2148.8	1211.0	890.9	746.2	660.5	625.9	632.0	632.0
37.5°	8609.6	8028.5	4395.5	2075.4	1127.4	784.9	642.2	566.7	536.2	538.2	546.4
40°	9439.3	8666.7	4369.0	1936.8	1035.7	687.1	556.6	495.4	472.9	464.8	462.8
42.5°	10324.1	9284.3	4373.1	1779.8	921.5	599.4	497.4	446.5	426.1	419.9	417.9
45°	11213.0	9873.6	4379.2	1616.7	801.2	532.1	454.6	411.8	399.5	391.4	391.4
47.5°	12048.9	10375.2	4265.0	1441.4	683.0	481.1	419.9	391.4	381.2	371.0	371.0
50°	12827.7	10709.5	3989.8	1237.5	589.2	440.3	393.5	373.1	362.8	352.7	352.7
52.5°	13433.2	10762.5	3535.1	1027.6	524.0	409.8	377.2	358.9	346.6	336.4	334.4
55°	13702.3	10430.2	2888.9	831.8	472.9	383.2	360.9	342.6	328.2	318.1	316.0
57.5°	13633.0	9730.8	2252.8	668.7	424.0	356.8	340.5	328.2	311.9	295.6	293.6
60°	13292.5	8795.1	1698.2	556.6	379.2	328.2	318.1	307.8	285.5	261.0	256.9
62.5°	12703.3	7618.7	1211.0	460.7	330.3	295.6	291.5	283.4	250.7	205.9	201.8
65°	11802.3	6189.6	815.5	383.2	283.4	258.9	261.0	246.7	203.9	152.9	148.8
67.5°	10485.2	4526.0	521.9	314.0	236.5	216.1	218.1	210.0	173.3	130.5	124.3
70°	8807.3	2996.9	340.5	238.5	189.6	167.2	179.4	181.4	146.8	106.0	102.0
72.5°	6456.7	1769.7	238.5	177.3	138.7	116.2	146.8	150.9	118.3	79.5	75.4
75°	3680.0	840.0	179.4	128.4	85.6	81.6	114.2	114.2	81.6	53.0	48.9
77.5°	1545.4	350.7	126.4	83.5	48.9	46.8	77.5	71.3	40.8	24.5	24.5
80°	446.5	157.0	67.2	40.8	20.4	18.3	30.5	22.4	10.1	4.1	4.1
82.5°	175.4	69.3	26.5	16.3	8.2	8.2	4.1	0.0	0.0	0.0	0.0
85°	103.9	28.5	12.2	6.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	26.5	6.1	4.1	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)