

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: P968297

Luminaire Tested: **NAV-SB5B-740-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968297
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-740-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23354.6 lumens
Efficiency: N/A
Efficacy: 127.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

Input Watts (W): 182.7
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

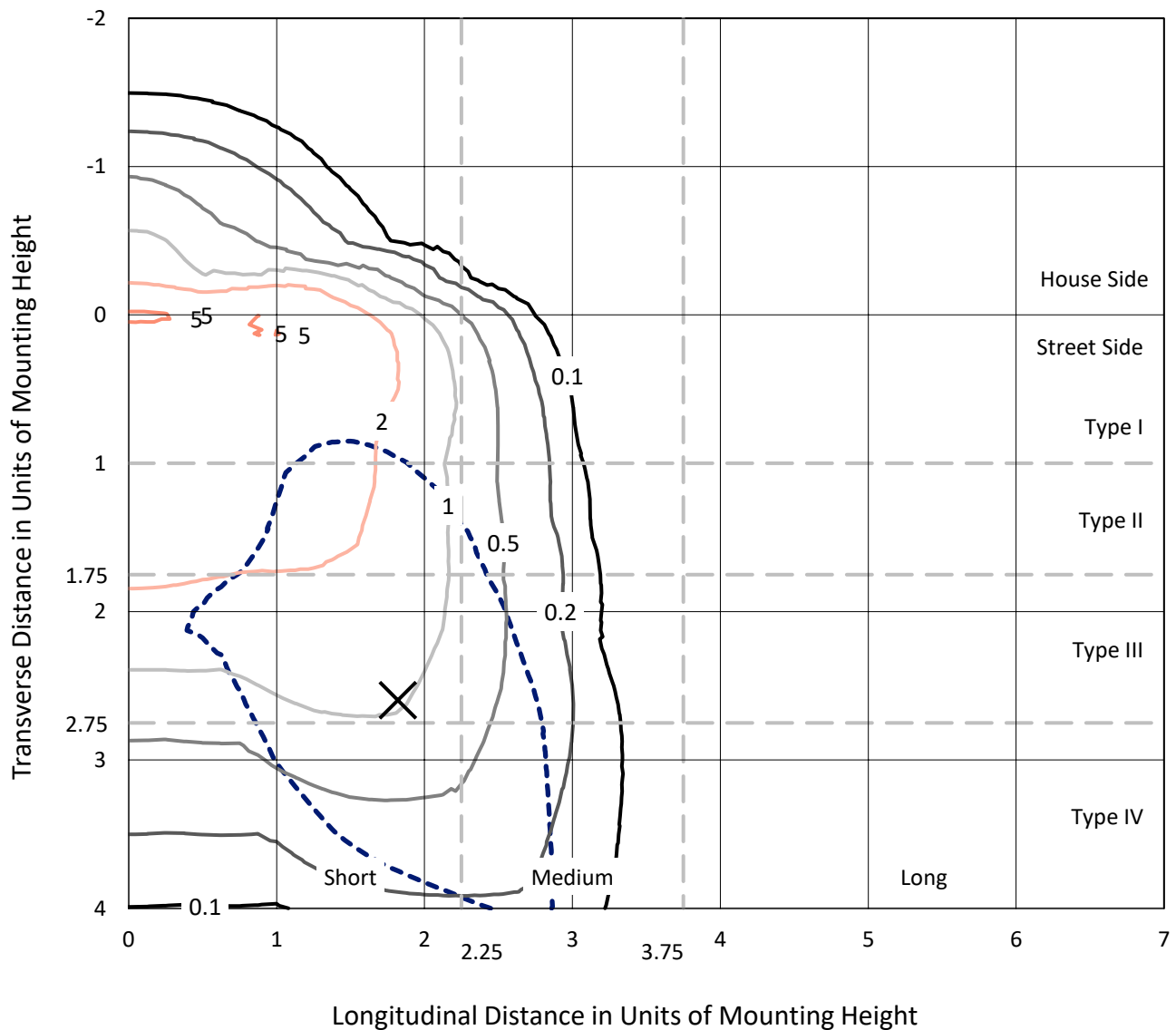


REPORT NUMBER: P968297

CATALOG NUMBER: NAV-SB5B-740-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

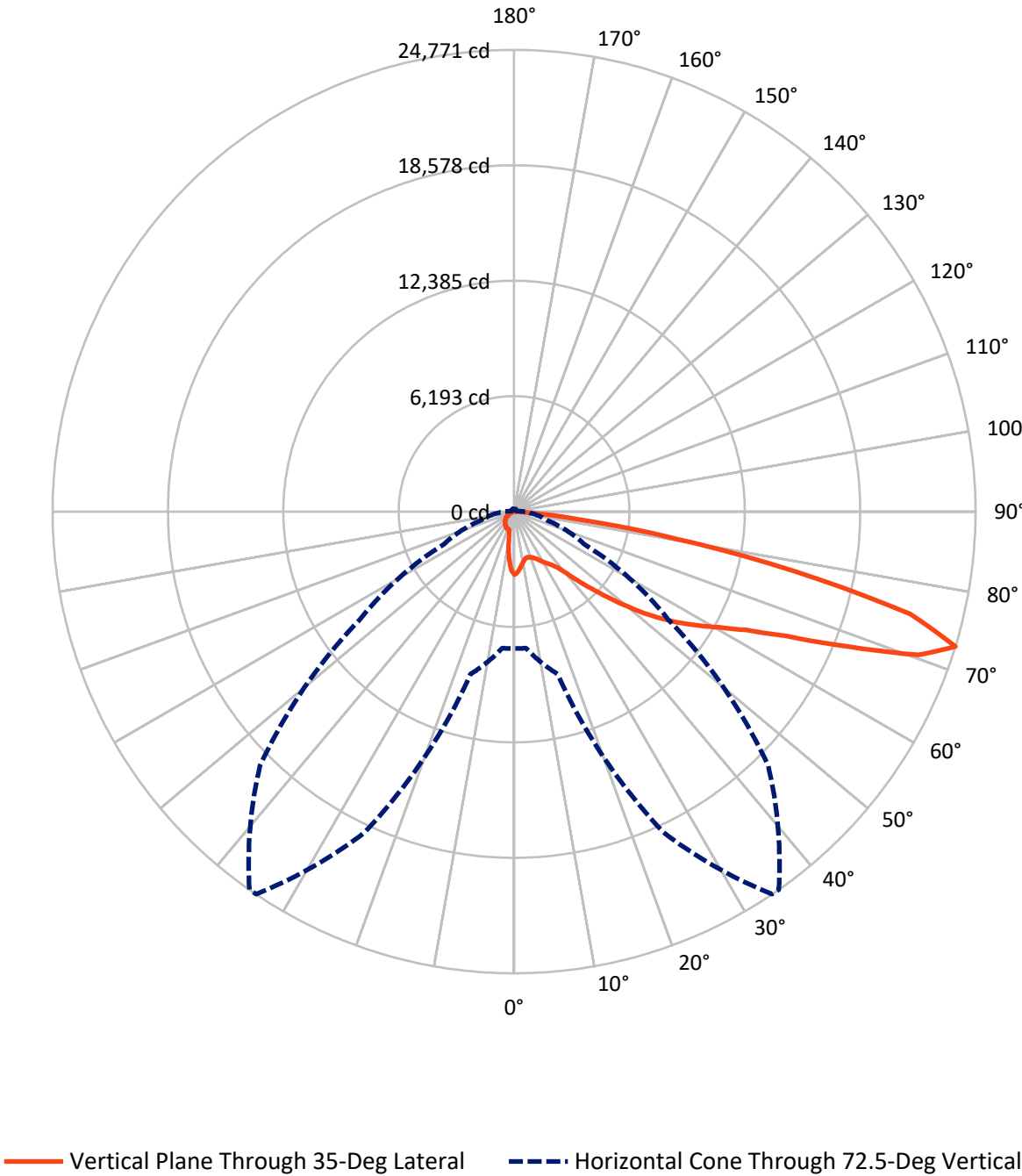
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
Type IV - Short - N/A

REPORT NUMBER: P968297
CATALOG NUMBER: NAV-SB5B-740-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P968297

CATALOG NUMBER: NAV-SB5B-740-U-T4FT-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2628.4	0.0	2628.4
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	20726.2	0.0	20726.2
	% Fixture	88.7	0.0	88.7
Total	Lumens	23354.6	0.0	23354.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.1	1.2
10°-20°	650.7	2.8
20°-30°	1057.0	4.5
30°-40°	1763.6	7.6
40°-50°	3336.9	14.3
50°-60°	5302.2	22.7
60°-70°	6559.2	28.1
70°-80°	4077.3	17.5
80°-90°	329.5	1.4
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°	23354.6	100.0
0°-180°	23354.6	100.0

Coefficient of Utilization



REPORT NUMBER: P968297

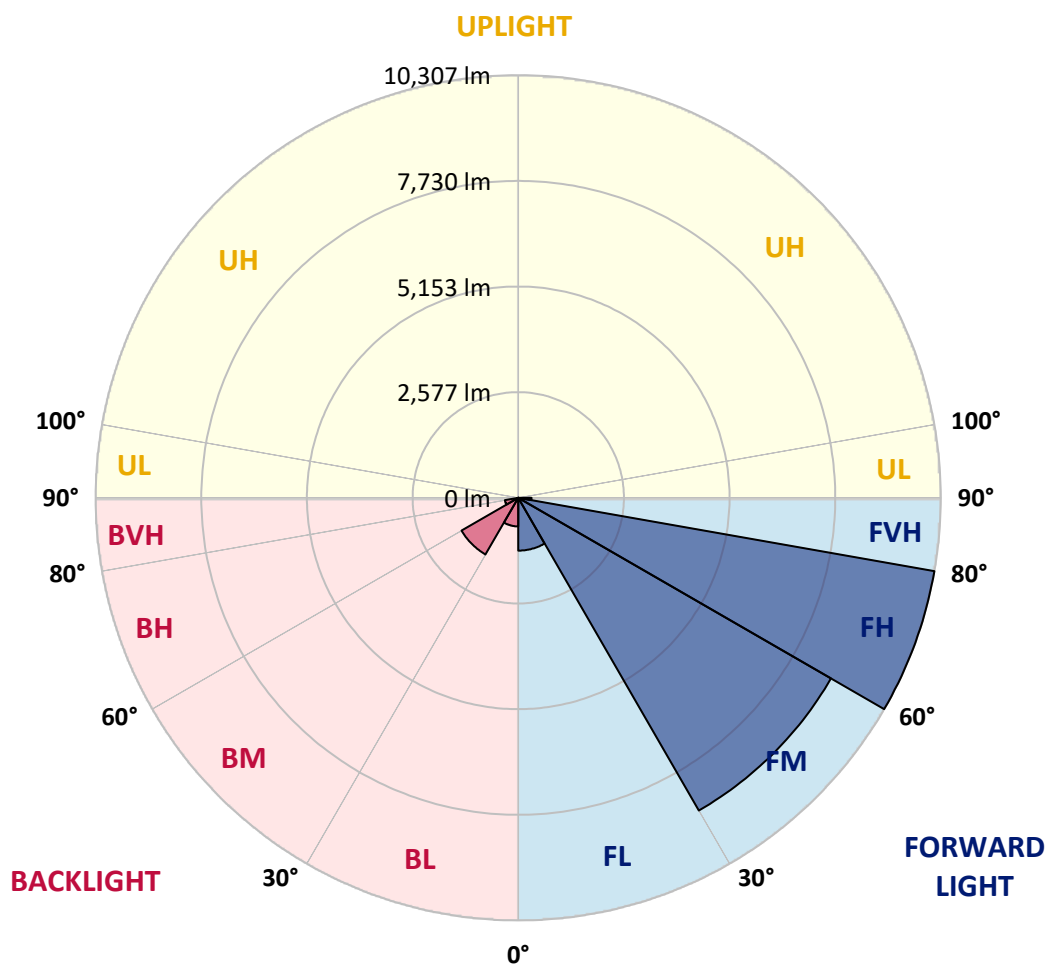
CATALOG NUMBER: NAV-SB5B-740-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1287.4	5.5			
FM	(30°-60°)	8807.0	37.7			
FH	(60°-80°)	10306.7	44.1			G4/12000
FVH	(80°-90°)	325.0	1.4			G3/500
BL	(0°-30°)	698.4	3.0	B2/1000		
BM	(30°-60°)	1595.7	6.8	B2/2500		
BH	(60°-80°)	329.8	1.4	B1/500		G1/500
BVH	(80°-90°)	4.5	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 IV Short



REPORT NUMBER: P968297

CATALOG NUMBER: NAV-SB5B-740-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	3384.9	3384.9	3384.9	3384.9	3384.9	3384.9	3384.9	3384.9	3384.9	3384.9	3384.9
2.5°	3234.3	3261.7	3266.8	3275.4	3275.4	3285.6	3302.8	3326.6	3366.0	3386.6	3400.2
5°	2981.0	3001.5	3027.2	3047.7	3087.1	3092.2	3158.9	3224.0	3314.7	3383.1	3431.1
7.5°	2726.0	2750.0	2784.2	2833.8	2885.2	2900.5	3001.5	3111.1	3254.8	3383.1	3463.6
10°	2546.3	2548.0	2578.9	2628.5	2710.6	2729.5	2852.7	3008.4	3188.1	3362.6	3494.4
12.5°	2445.3	2457.3	2471.1	2508.7	2587.4	2599.4	2731.2	2914.3	3121.3	3350.6	3530.3
15°	2445.3	2454.0	2462.5	2481.3	2544.7	2554.9	2671.3	2854.4	3087.1	3355.7	3588.5
17.5°	2471.1	2484.7	2477.9	2500.2	2566.9	2573.8	2676.4	2837.3	3085.4	3388.2	3677.5
20°	2532.7	2542.9	2529.3	2542.9	2609.6	2623.4	2729.5	2869.8	3114.5	3444.7	3788.7
22.5°	2630.3	2635.4	2602.8	2613.1	2681.5	2698.6	2821.8	2962.1	3184.7	3535.4	3937.6
25°	2753.5	2763.7	2714.1	2726.0	2791.1	2811.6	2953.6	3100.8	3295.9	3660.4	4127.6
27.5°	2895.4	2900.5	2857.8	2856.1	2939.9	2969.0	3112.8	3271.9	3444.7	3817.8	4367.1
30°	3058.0	3073.5	3032.4	3025.5	3131.6	3155.6	3297.6	3482.4	3663.8	4054.0	4707.6
32.5°	3186.3	3198.3	3174.4	3191.5	3299.3	3318.1	3521.8	3780.2	4007.7	4389.4	5171.4
35°	3371.2	3378.0	3323.3	3354.1	3477.3	3525.2	3828.1	4197.7	4440.7	4810.3	5777.2
37.5°	4040.2	4040.2	3807.6	3655.3	3773.3	3816.1	4247.3	4723.1	4974.6	5375.1	6540.4
40°	4966.0	4950.6	4610.1	4298.6	4283.3	4367.1	4844.6	5385.3	5664.3	6052.7	7399.5
42.5°	5953.5	5929.5	5465.7	5157.7	5106.3	5135.5	5534.2	6201.6	6485.7	6879.3	8323.5
45°	6829.7	6822.8	6398.4	5984.3	5891.9	5984.3	6395.0	7156.4	7360.1	7774.2	9245.9
47.5°	7563.8	7563.8	7254.0	6983.6	6935.8	6990.5	7560.3	8215.8	8196.9	8727.5	10144.3
50°	8409.1	8402.2	8108.0	7991.6	8041.2	8118.2	8901.9	9331.5	9062.8	9663.5	10946.9
52.5°	9001.2	9042.2	8941.3	8922.5	9175.8	9309.3	10264.1	10423.2	9838.1	10551.7	11547.5
55°	9470.1	9518.0	9634.4	9766.2	10253.9	10428.5	11583.5	11458.6	10486.6	11321.6	11893.3
57.5°	10134.1	10065.6	10245.3	10505.4	11294.3	11504.8	12861.8	12435.7	11008.5	11946.3	11930.9
60°	10940.0	10950.4	10981.1	11309.7	12333.0	12603.4	14121.3	13359.7	11343.9	12329.6	11513.3
62.5°	11908.7	11924.0	11987.4	12492.2	13727.7	13982.6	15462.9	14116.2	11497.9	12221.8	10435.2
65°	11841.9	11906.9	12613.6	14340.4	15847.9	16099.5	17028.7	14646.6	11265.2	11236.2	8496.4
67.5°	10787.8	10893.9	12076.3	16547.9	19044.6	19325.2	18921.4	14751.1	10260.7	8737.7	5542.8
70°	9405.1	9442.7	10864.8	18532.9	22746.1	23030.1	20615.5	13602.8	7786.2	4873.7	2483.1
72.5°	7344.7	7353.2	9021.7	18993.2	24755.1	24770.5	19285.9	10098.1	4187.4	1872.2	862.4
75°	5246.7	5195.4	6042.5	15403.0	21779.2	21953.8	14458.4	4736.7	1600.0	884.7	429.5
77.5°	2813.3	2869.8	3419.1	9134.7	15045.4	15343.1	7888.9	1365.6	814.6	602.4	284.0
80°	869.3	917.3	1401.5	4182.3	8522.1	8701.7	2924.5	607.5	568.2	429.5	186.5
82.5°	273.8	284.0	653.7	1757.5	3537.2	3619.3	847.1	344.0	388.5	284.0	109.5
85°	78.7	80.5	290.9	655.4	874.4	891.5	237.9	133.5	222.4	176.3	56.5
87.5°	8.5	27.4	109.5	109.5	77.0	75.3	25.6	29.1	63.3	22.2	10.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P968297

CATALOG NUMBER: NAV-SB5B-740-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3384.9	3384.9	3384.9	3384.9	3384.9	3384.9	3384.9	3384.9	3384.9	3384.9	3384.9
2.5°	3391.7	3393.5	3371.2	3333.5	3292.5	3258.3	3215.4	3181.2	3157.3	3150.4	3162.4
5°	3415.7	3403.7	3340.4	3225.7	3088.8	2970.8	2838.9	2734.6	2666.1	2637.0	2647.3
7.5°	3451.6	3417.4	3278.8	3052.9	2791.1	2558.3	2322.1	2139.1	2022.7	1964.5	1973.1
10°	3482.4	3414.0	3176.1	2803.1	2402.6	2050.1	1731.8	1511.1	1387.8	1329.6	1331.4
12.5°	3511.5	3412.2	3042.6	2506.9	1964.5	1533.3	1237.3	1127.7	1093.5	1081.5	1078.1
15°	3566.3	3417.4	2874.9	2168.2	1528.2	1158.6	1050.7	1049.0	1055.9	1052.5	1050.7
17.5°	3641.5	3422.5	2685.0	1808.8	1179.1	1021.6	1016.5	1031.9	1042.1	1037.0	1035.4
20°	3739.1	3443.1	2483.1	1452.8	1013.1	987.4	999.4	1013.1	1021.6	1013.1	1011.4
22.5°	3876.0	3479.0	2262.3	1167.1	960.0	966.9	977.1	992.5	1001.1	989.1	987.4
25°	4043.7	3535.4	2045.0	1014.7	934.4	942.9	958.3	975.4	985.6	973.7	972.0
27.5°	4261.0	3626.1	1844.7	980.5	908.7	913.8	936.0	961.8	975.4	960.0	960.0
30°	4575.9	3775.1	1671.9	996.0	893.3	881.3	912.1	948.0	963.4	949.8	948.0
32.5°	4993.5	3985.5	1565.8	1019.9	886.4	843.7	872.8	918.9	944.6	936.0	936.0
35°	5541.0	4305.5	1524.7	1047.2	881.3	804.3	824.8	874.4	918.9	927.5	927.5
37.5°	6205.0	4750.5	1536.7	1059.2	865.9	771.8	782.1	824.8	883.0	910.4	917.3
40°	6959.6	5269.0	1605.1	1047.2	848.8	744.4	746.1	778.6	829.9	871.0	884.7
42.5°	7738.3	5874.8	1731.8	1002.8	833.4	720.5	715.3	737.6	771.8	800.8	812.8
45°	8479.3	6497.7	1856.7	941.2	814.6	696.5	684.5	693.1	699.9	711.9	718.7
47.5°	9126.1	6935.8	1820.8	884.7	788.8	669.1	648.5	645.1	624.6	622.9	621.2
50°	9572.8	7031.6	1617.1	828.2	751.2	638.3	605.8	585.3	549.3	532.2	533.9
52.5°	9714.8	6653.4	1321.1	771.8	689.6	597.3	551.0	518.5	474.1	458.6	456.9
55°	9526.6	5912.4	1055.9	703.4	604.0	542.4	491.2	448.3	412.5	393.6	393.6
57.5°	9066.2	4969.5	835.1	622.9	513.4	480.8	429.5	386.7	356.0	337.1	333.7
60°	8303.0	3946.1	660.5	527.1	438.1	414.1	361.1	333.7	306.3	284.0	278.9
62.5°	7144.5	2816.7	518.5	417.6	366.2	338.9	308.0	287.5	255.0	224.2	219.0
65°	5575.3	1723.2	400.5	306.3	294.4	280.6	261.8	243.0	203.7	172.8	167.7
67.5°	3516.7	816.3	285.8	231.0	232.8	225.9	217.3	201.9	172.8	145.4	142.1
70°	1548.7	395.3	188.2	176.3	172.8	172.8	179.7	174.6	147.2	121.5	116.3
72.5°	527.1	212.2	140.3	133.5	124.9	123.2	150.6	145.4	118.1	94.1	89.0
75°	275.5	142.1	102.7	95.8	75.3	90.7	119.8	113.0	83.8	61.6	56.5
77.5°	179.7	101.0	70.2	61.6	42.7	59.9	89.0	78.7	49.6	30.9	27.4
80°	113.0	66.7	41.1	29.1	20.5	32.5	47.9	34.2	18.9	6.9	5.1
82.5°	59.9	34.2	15.4	10.2	8.5	10.2	12.0	8.5	3.4	0.0	0.0
85°	24.0	12.0	5.1	3.4	1.7	0.0	3.4	1.7	0.0	0.0	0.0
87.5°	8.5	1.7	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)