

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: P969344

Luminaire Tested: **NAV-SB5D-740-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969344
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-740-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42601.1 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 364.9
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

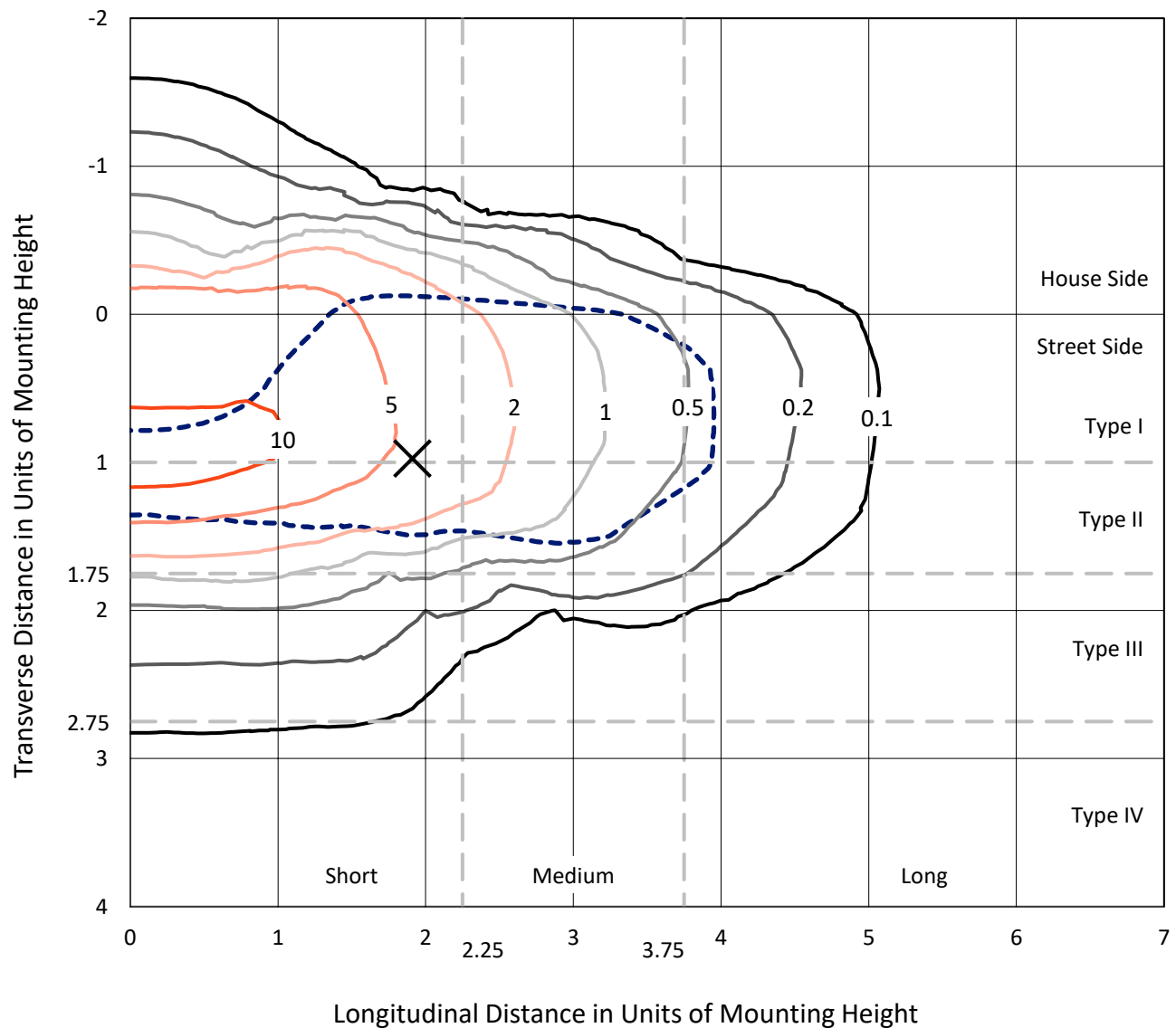


REPORT NUMBER: P969344

CATALOG NUMBER: NAV-SB5D-740-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

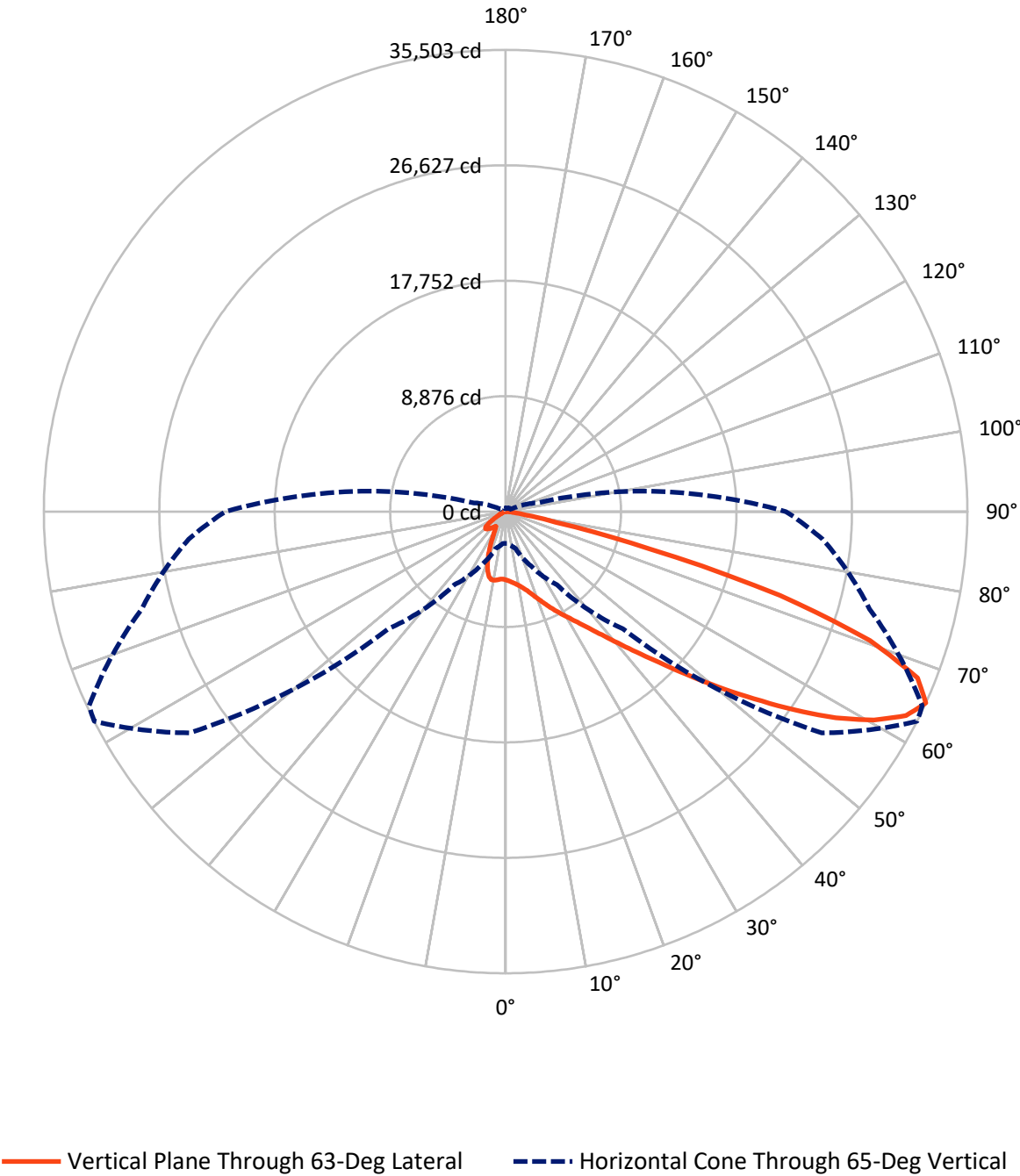


Based on 25 foot mounting height. Maximum calculated value = 14.4 fc

Type II - Short - N/A

REPORT NUMBER: P969344
CATALOG NUMBER: NAV-SB5D-740-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P969344

CATALOG NUMBER: NAV-SB5D-740-U-T2U-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6262.0	0.0	6262.0
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	36339.0	0.0	36339.0
	% Fixture	85.3	0.0	85.3
Total	Lumens	42601.1	0.0	42601.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	495.4	1.2
10°-20°	1374.5	3.2
20°-30°	2393.4	5.6
30°-40°	4313.8	10.1
40°-50°	8555.6	20.1
50°-60°	11654.1	27.4
60°-70°	9302.3	21.8
70°-80°	4209.5	9.9
80°-90°	302.6	0.7
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°	42601.1	100.0
0°-180°	42601.1	100.0

Coefficient of Utilization



REPORT NUMBER: P969344

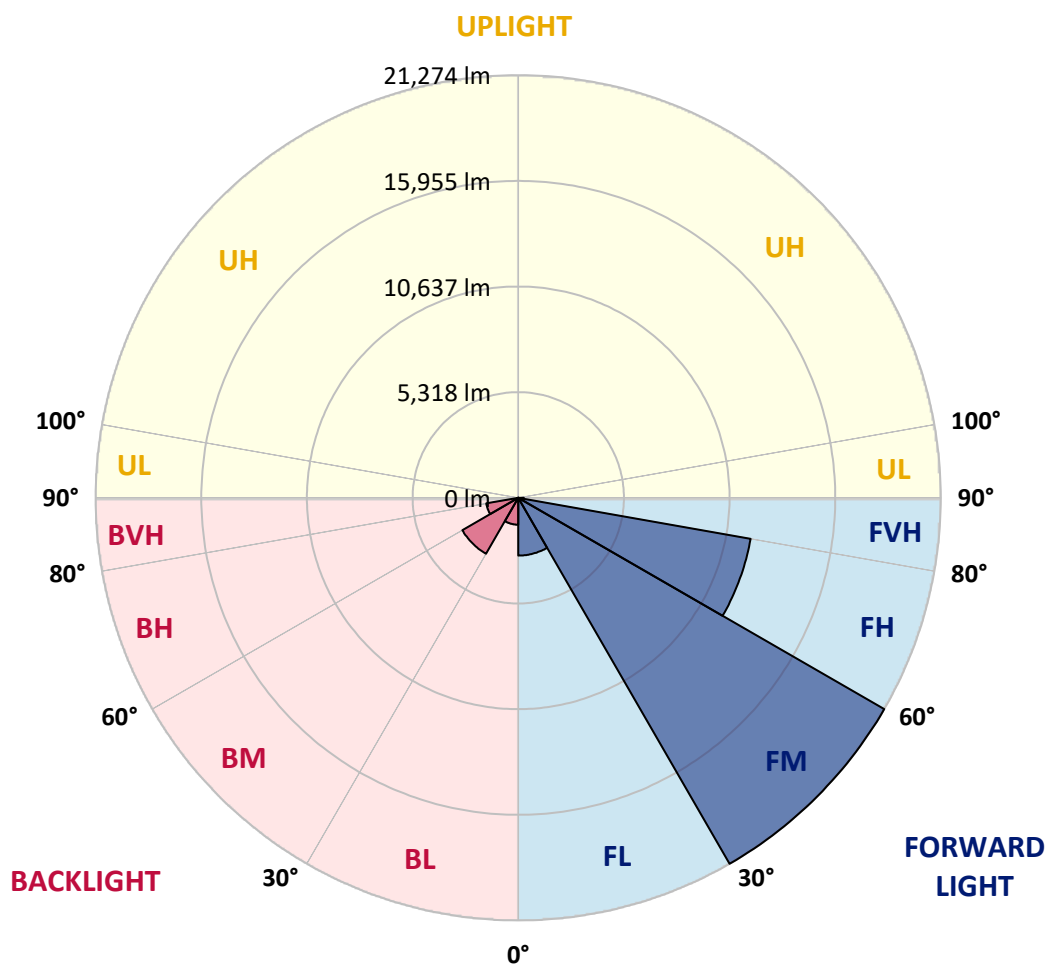
CATALOG NUMBER: NAV-SB5D-740-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2908.0	6.8			
FM	(30°-60°)	21273.9	49.9			
FH	(60°-80°)	11877.0	27.9			G4/12000
FVH	(80°-90°)	280.1	0.7			G3/500
BL	(0°-30°)	1355.2	3.2	B3/2500		
BM	(30°-60°)	3249.6	7.6	B3/5000		
BH	(60°-80°)	1634.8	3.8	B3/2500		G3/2500
BVH	(80°-90°)	22.5	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Short



REPORT NUMBER: P969344

CATALOG NUMBER: NAV-SB5D-740-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	5257.7	5257.7	5257.7	5257.7	5257.7	5257.7	5257.7	5257.7	5257.7	5257.7	5257.7
2.5°	5380.8	5366.2	5386.7	5378.0	5372.0	5360.3	5354.5	5348.7	5336.9	5328.2	5292.9
5°	5395.5	5386.7	5407.3	5424.8	5442.4	5460.0	5468.8	5480.5	5468.8	5445.3	5410.2
7.5°	5272.4	5266.6	5310.5	5363.3	5442.4	5509.8	5583.1	5624.1	5627.0	5618.2	5580.2
10°	5263.7	5249.0	5292.9	5357.5	5460.0	5580.2	5709.1	5797.0	5808.8	5846.9	5805.8
12.5°	5401.3	5386.7	5448.3	5518.6	5624.1	5750.1	5908.4	6031.5	6049.0	6101.8	6072.5
15°	5632.9	5612.4	5682.7	5773.6	5908.4	6052.0	6219.1	6330.4	6345.1	6409.5	6356.8
17.5°	5902.6	5882.1	5964.1	6060.8	6207.3	6403.7	6597.1	6720.2	6737.8	6778.8	6682.1
20°	6248.4	6222.0	6286.4	6374.4	6529.8	6764.2	6995.7	7171.5	7168.6	7168.6	7010.4
22.5°	6649.9	6608.9	6664.6	6734.9	6881.4	7165.7	7473.4	7681.6	7681.6	7599.5	7338.6
25°	7080.7	7039.7	7101.2	7165.7	7294.6	7617.1	7977.5	8235.5	8247.2	8106.4	7690.3
27.5°	7620.0	7567.2	7614.1	7690.3	7766.5	8094.7	8522.7	8821.6	8827.4	8610.5	8024.4
30°	8657.5	8508.0	8361.4	8279.3	8314.6	8639.8	9097.1	9428.3	9457.6	9158.6	8387.8
32.5°	10556.6	10527.3	10011.5	9337.3	8985.7	9226.0	9738.9	10137.5	10155.1	9771.1	8859.7
35°	13507.9	13472.7	12643.3	11359.6	10213.7	10011.5	10518.4	10990.4	10978.6	10544.9	9472.2
37.5°	17030.6	16998.4	15905.2	14187.7	12332.6	11198.4	11523.8	12019.0	12092.3	11523.8	10263.5
40°	20040.5	19920.4	19228.7	17572.8	15146.1	13167.9	12953.9	13282.2	13358.4	12684.3	11268.7
42.5°	22320.6	22218.1	21866.3	20831.8	18551.7	16081.0	14639.2	14765.1	14850.1	14041.3	12423.5
45°	23501.7	23478.2	23619.0	23522.2	22021.7	19656.5	17048.2	16523.6	16555.8	15544.7	13733.6
47.5°	23668.8	23657.1	24298.9	25207.4	25005.2	23689.3	20140.1	18715.8	18601.5	17241.6	15157.9
50°	22684.1	22660.6	23891.5	25594.2	26998.1	27077.2	23651.2	21186.4	20934.4	18997.1	16643.7
52.5°	19539.4	19533.5	21555.7	24389.8	27698.6	30043.2	27121.2	23900.3	23478.2	20855.3	18214.7
55°	15034.8	15143.2	17461.4	20811.3	26420.7	31470.5	30236.6	26913.1	26265.4	22725.1	19662.5
57.5°	10650.4	10808.6	13100.5	16084.0	22458.4	30626.4	32343.8	29931.8	29234.3	24589.0	21130.8
60°	5720.8	5861.5	8156.3	11717.2	16708.2	27478.7	33454.6	32551.8	31892.5	26359.2	22455.5
62.5°	3408.4	3455.4	4404.9	7564.3	11301.0	20993.0	32982.8	34547.7	34005.5	27845.2	23607.2
65°	2447.2	2456.0	2933.7	4618.9	6860.9	12754.7	29673.9	35503.1	35336.2	28964.7	24460.1
67.5°	2060.4	2054.5	2253.8	3068.5	4674.5	6389.0	22742.7	34152.1	34861.4	29673.9	24943.7
70°	1767.2	1776.0	2010.5	2247.9	3514.0	3616.5	11306.9	29735.5	31247.7	29861.4	24914.4
72.5°	1315.9	1345.2	1562.1	2048.6	2652.3	2488.2	3903.8	22048.1	24782.4	28135.2	23621.8
75°	929.1	943.7	1099.0	1723.3	1978.2	1811.2	1992.9	11397.7	14902.9	21570.4	19334.2
77.5°	715.1	741.5	832.3	1204.6	1948.9	1271.9	1219.2	3944.8	6060.8	13030.1	13255.8
80°	386.8	433.8	600.9	870.4	1368.7	899.7	603.7	1570.9	2054.5	6093.0	5111.3
82.5°	199.3	222.7	419.1	627.2	779.6	785.5	298.9	653.5	847.0	1881.6	700.5
85°	79.1	96.8	281.4	345.8	401.5	386.8	134.8	263.7	304.8	521.7	213.9
87.5°	17.6	29.3	102.6	79.1	76.2	82.1	32.3	61.5	58.6	61.5	38.1
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: P969344

CATALOG NUMBER: NAV-SB5D-740-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5257.7	5257.7	5257.7	5257.7	5257.7	5257.7	5257.7	5257.7	5257.7	5257.7	5257.7
2.5°	5290.0	5278.3	5246.1	5210.9	5169.9	5146.4	5131.8	5128.8	5108.3	5093.6	5108.3
5°	5378.0	5366.2	5304.7	5231.4	5152.3	5090.8	5032.1	4979.3	4903.2	4888.5	4882.6
7.5°	5553.8	5521.6	5421.9	5322.2	5172.8	4994.0	4777.1	4528.0	4305.3	4237.9	4205.7
10°	5770.6	5726.7	5600.7	5424.8	5093.6	4607.2	4082.6	3596.0	3209.2	3100.7	3059.7
12.5°	6016.9	5978.7	5811.6	5486.4	4762.5	3880.3	3077.3	2473.5	2098.4	2004.6	1978.2
15°	6309.9	6254.2	6022.7	5392.6	4170.4	2948.3	2113.0	1755.5	1620.7	1603.1	1585.6
17.5°	6620.6	6529.8	6210.3	5055.5	3373.3	2095.5	1632.4	1529.8	1471.3	1453.7	1444.8
20°	6904.8	6787.7	6321.7	4545.6	2520.5	1632.4	1462.5	1395.0	1342.2	1321.7	1310.1
22.5°	7189.1	7022.1	6321.7	3851.0	1890.3	1447.8	1342.2	1280.7	1219.2	1192.8	1178.1
25°	7485.2	7262.4	6210.3	3077.3	1521.1	1327.7	1227.9	1160.6	1107.8	1075.6	1063.8
27.5°	7772.4	7464.7	5955.2	2344.6	1354.0	1222.1	1122.5	1058.0	1008.2	984.7	984.7
30°	8044.9	7663.9	5597.7	1779.0	1245.6	1119.5	1025.7	970.1	920.2	896.8	899.7
32.5°	8414.2	7916.0	5216.7	1459.5	1151.8	1022.8	937.9	885.1	841.1	823.6	823.6
35°	8927.0	8288.2	4888.5	1433.2	1072.7	943.7	858.7	808.9	765.0	750.3	750.3
37.5°	9653.9	8889.0	4715.6	1608.9	1008.2	873.4	794.3	741.5	700.5	688.7	685.8
40°	10550.7	9703.8	4809.4	1784.8	964.2	811.8	735.6	682.9	647.7	633.0	630.1
42.5°	11614.6	10709.0	5328.2	1919.6	934.9	759.1	680.0	621.4	597.9	592.0	592.0
45°	12836.7	11813.8	6122.3	2063.2	888.1	709.2	624.2	580.3	562.7	559.8	556.9
47.5°	14225.9	13027.2	7042.6	2242.0	841.1	662.4	580.3	550.9	536.3	530.4	530.4
50°	15603.4	14249.3	7989.3	2341.7	803.0	618.4	545.1	521.7	509.9	507.1	507.1
52.5°	17045.2	15506.6	8754.1	2247.9	770.8	583.2	515.8	498.3	486.5	483.6	483.6
55°	18419.8	16523.6	8886.0	1907.9	706.3	548.1	483.6	474.8	460.1	460.1	457.2
57.5°	19603.8	17033.6	7954.1	1400.9	641.9	495.3	451.3	442.6	430.8	427.9	425.0
60°	20691.2	16887.0	6140.0	943.7	571.5	442.6	410.3	404.5	392.7	378.0	375.2
62.5°	21303.7	16242.3	4199.7	615.4	501.1	386.8	363.4	360.5	334.2	304.8	298.9
65°	21535.1	14917.5	2620.1	448.4	419.1	331.2	313.5	307.7	269.7	237.4	234.4
67.5°	21332.9	12737.1	1321.7	354.6	331.2	275.5	257.9	257.9	231.5	202.2	199.3
70°	20524.1	9548.4	556.9	284.2	255.0	211.0	211.0	222.7	196.4	164.1	161.2
72.5°	18768.6	6424.2	296.0	216.9	190.5	149.4	172.9	181.7	155.3	123.1	123.1
75°	14920.5	3918.4	205.1	161.2	120.1	105.5	131.9	137.8	105.5	82.1	79.1
77.5°	10204.9	2250.8	137.8	102.6	76.2	61.5	90.8	85.0	55.7	38.1	41.0
80°	4481.1	937.9	79.1	46.8	29.3	23.5	32.3	23.5	17.6	11.7	11.7
82.5°	524.6	219.8	29.3	17.6	11.7	5.8	3.0	0.0	0.0	0.0	0.0
85°	108.4	26.3	14.7	5.8	3.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	20.5	5.8	3.0	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)