

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: P967121

Luminaire Tested: **NAV-SB4D-722-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967121
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-722-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26599.8 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G5

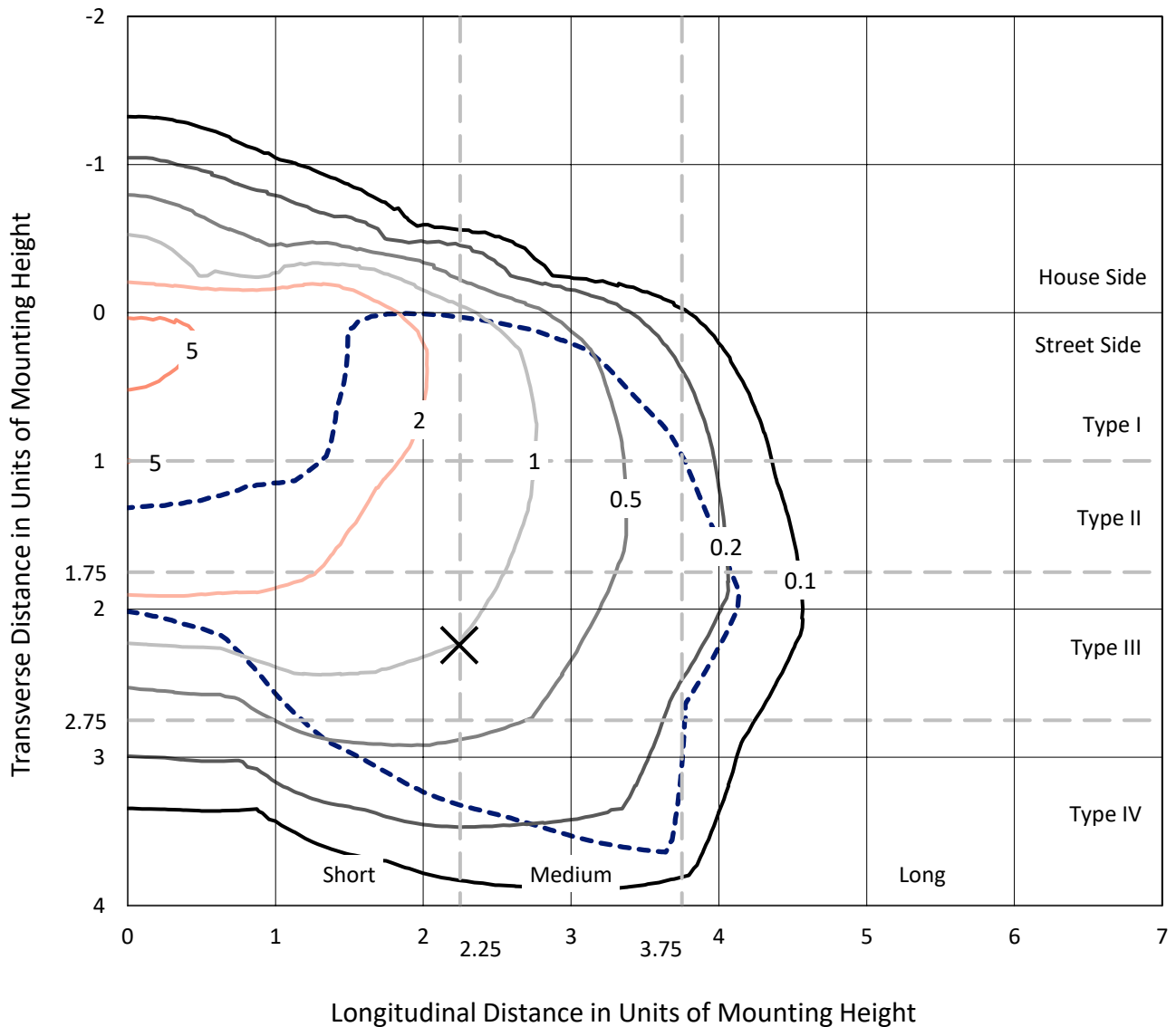
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

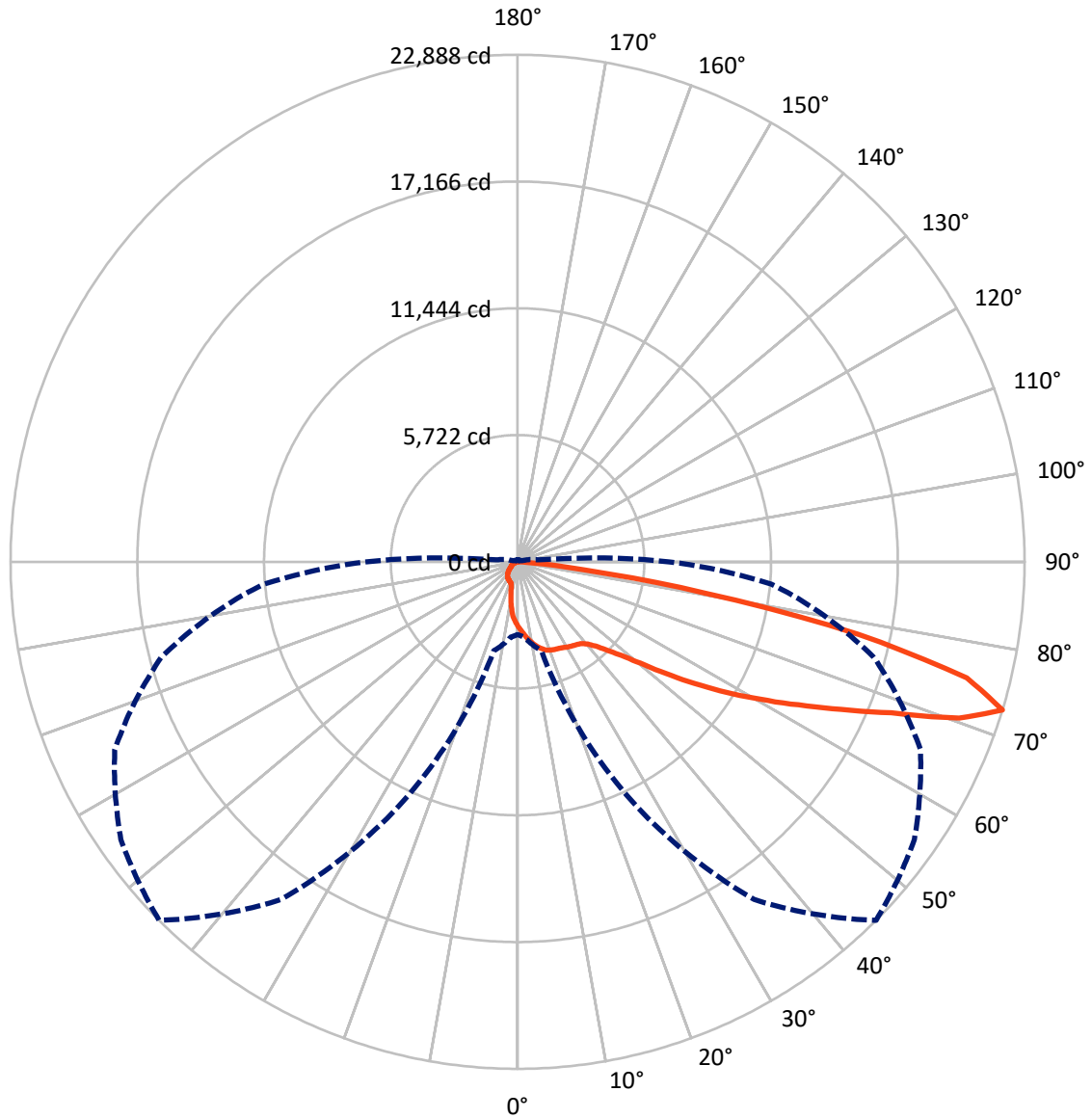
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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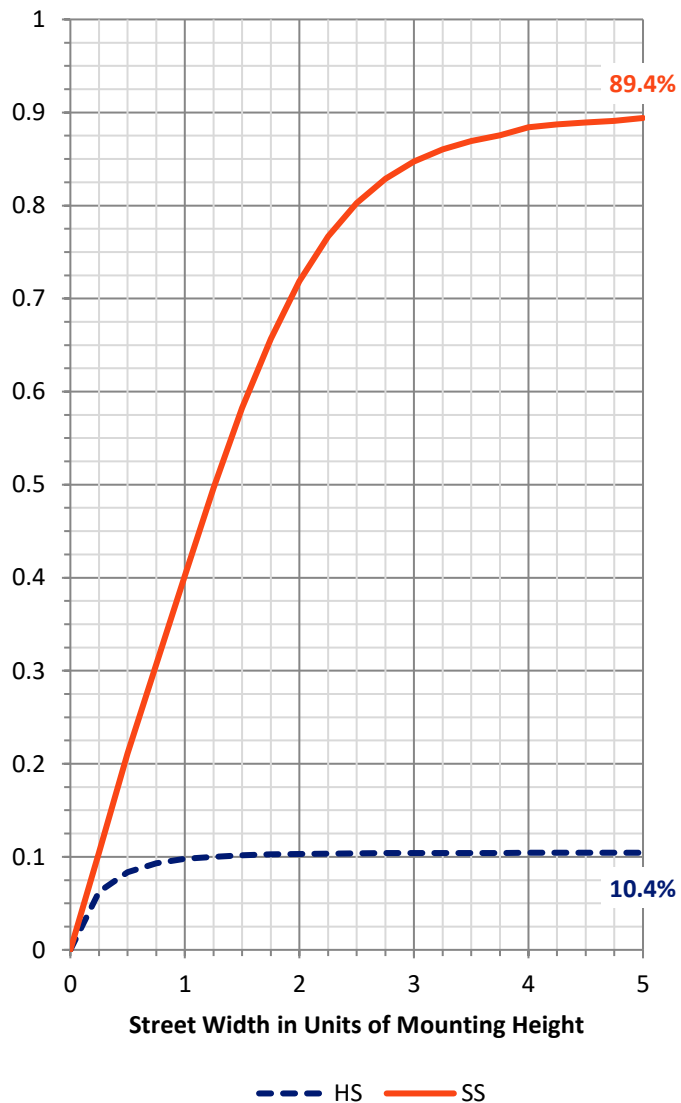
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2794.9	0.0	2794.9
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	23804.9	0.0	23804.9
	% Fixture	89.5	0.0	89.5
Total	Lumens	26599.8	0.0	26599.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.6	1.0
10°-20°	802.4	3.0
20°-30°	1317.7	5.0
30°-40°	1868.8	7.0
40°-50°	3089.0	11.6
50°-60°	5549.0	20.9
60°-70°	7705.1	29.0
70°-80°	5589.0	21.0
80°-90°	404.1	1.5
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°	26599.8	100.0
0°-180°	26599.8	100.0

Coefficient of Utilization

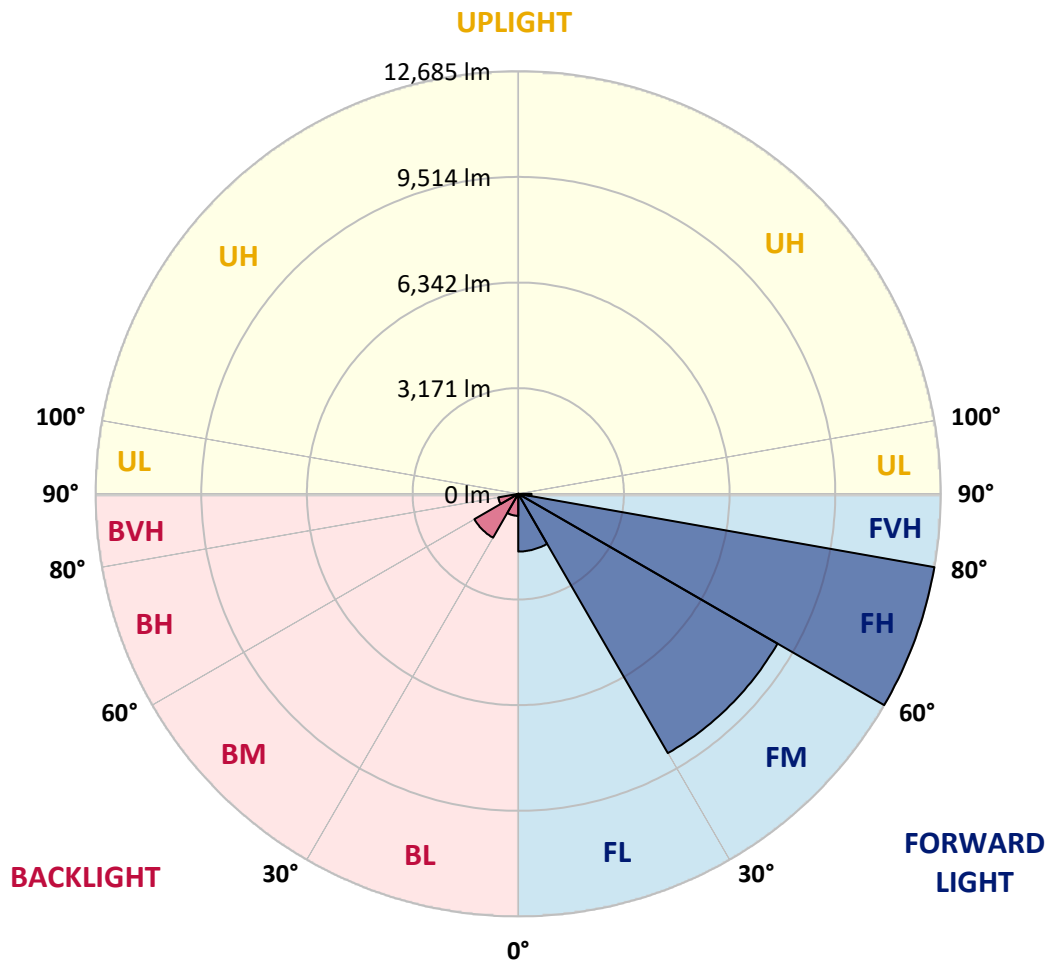


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1732.7	6.5			
FM (30°-60°)	8986.8	33.8			
FH (60°-80°)	12684.7	47.7			G5
FVH (80°-90°)	400.7	1.5			G3/500
BL (0°-30°)	662.0	2.5	B2/1000		
BM (30°-60°)	1520.0	5.7	B2/2500		
BH (60°-80°)	609.5	2.3	B2/1000		G2/1000
BVH (80°-90°)	3.4	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-G5
 Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1
2.5°	3182.7	3188.3	3184.6	3162.8	3126.5	3106.5	3095.6	3059.3	3035.7	2993.9	2950.4
5°	3475.1	3496.9	3484.2	3440.6	3371.6	3322.5	3308.1	3233.6	3166.4	3088.3	2997.6
7.5°	3785.5	3796.5	3772.8	3716.5	3624.0	3540.5	3527.7	3424.2	3317.1	3197.3	3073.9
10°	4054.3	4067.0	4030.7	3948.9	3843.6	3740.1	3722.0	3607.6	3480.5	3333.5	3175.6
12.5°	4279.4	4292.1	4244.9	4146.8	4030.7	3923.5	3905.4	3785.5	3645.7	3482.3	3286.3
15°	4450.0	4473.7	4410.2	4304.8	4179.5	4072.4	4063.3	3945.3	3809.2	3627.6	3418.8
17.5°	4550.0	4573.5	4513.6	4386.5	4279.4	4188.7	4177.7	4079.7	3952.6	3778.3	3547.7
20°	4566.3	4588.1	4524.6	4413.8	4324.8	4252.2	4246.7	4176.0	4083.3	3916.3	3687.5
22.5°	4517.3	4544.4	4486.4	4397.5	4335.6	4297.5	4290.3	4250.4	4197.7	4056.1	3818.2
25°	4466.4	4488.2	4444.6	4366.6	4333.9	4330.2	4335.6	4328.5	4317.5	4197.7	3970.7
27.5°	4462.7	4486.4	4437.3	4362.9	4344.8	4382.9	4388.3	4422.9	4431.9	4326.6	4117.8
30°	4493.6	4510.0	4462.7	4384.7	4375.6	4462.7	4464.6	4526.3	4540.9	4435.6	4263.1
32.5°	4560.8	4579.0	4531.7	4417.3	4404.7	4526.3	4531.7	4613.5	4637.1	4551.7	4415.6
35°	4718.8	4740.5	4686.1	4508.2	4462.7	4586.3	4602.6	4698.8	4746.1	4675.2	4573.5
37.5°	5112.8	5049.3	4974.7	4691.5	4595.3	4680.7	4707.9	4820.5	4904.0	4822.3	4762.4
40°	6091.4	5891.7	5659.2	5003.8	4827.8	4882.2	4904.0	5016.6	5130.9	5051.0	5022.0
42.5°	7560.2	7324.2	6950.2	5722.8	5178.1	5205.4	5221.7	5319.7	5481.4	5417.8	5425.0
45°	8869.3	8783.9	8402.6	6950.2	5833.6	5699.2	5719.2	5770.0	6007.8	5984.3	6031.5
47.5°	9875.2	9826.1	9532.0	8359.1	6941.1	6303.9	6360.1	6383.7	6726.9	6810.4	6937.5
50°	10648.6	10630.4	10367.2	9611.8	8388.2	7195.3	7215.3	7164.4	7678.3	7885.2	8126.7
52.5°	11378.4	11440.2	11245.9	10775.7	9933.3	8362.8	8359.1	8119.4	8812.9	9125.3	9537.4
55°	12037.5	12059.3	12079.3	11963.1	11487.4	9691.8	9657.2	9265.1	10129.4	10452.5	10899.1
57.5°	12656.7	12665.7	12843.7	13081.5	13105.1	11118.8	11055.2	10585.1	11567.3	11797.9	12072.0
60°	13072.4	13114.2	13490.0	14150.9	14439.6	12591.3	12556.8	12077.5	13030.6	13137.8	13087.0
62.5°	12473.2	12727.4	13675.2	14986.1	15699.6	14223.5	14207.2	13756.9	14570.3	14483.1	14047.4
65°	10096.7	10527.0	12193.7	15550.8	16936.1	16046.4	16070.1	15590.7	16151.7	15868.4	14828.2
67.5°	7062.8	7516.6	9488.4	15596.1	18317.8	18187.0	18323.2	17571.5	17831.1	17195.7	15013.3
70°	4884.0	5118.2	6401.8	14619.4	19394.4	21135.6	21131.9	20004.4	19501.5	17800.3	14069.2
72.5°	3284.4	3406.1	4157.7	11598.2	18602.8	22887.6	22782.4	21863.7	20064.4	16647.3	11494.7
75°	1385.3	1474.3	1924.5	6518.1	14717.4	20939.5	20654.5	19321.8	17827.5	13108.7	7171.7
77.5°	439.4	477.5	758.9	2333.1	8106.7	15739.6	15438.1	12066.6	11948.5	6576.2	2621.7
80°	208.8	243.3	426.7	936.8	3190.0	8560.6	8518.9	5474.1	5140.0	1775.7	526.5
82.5°	90.8	107.1	236.1	501.1	1427.1	3053.9	3115.6	1862.8	1541.5	673.6	161.5
85°	29.0	38.1	109.0	230.6	602.8	758.9	749.9	443.0	620.9	366.7	56.3
87.5°	0.0	0.0	36.3	52.7	61.7	43.6	49.0	38.1	172.5	101.7	20.0
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°	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1
2.5°	2928.6	2899.5	2848.7	2801.5	2759.7	2718.0	2692.6	2656.3	2652.6	2652.6	2661.7
5°	2948.5	2901.4	2810.5	2714.3	2603.6	2498.3	2393.0	2291.3	2258.6	2235.0	2245.9
7.5°	3006.6	2932.2	2788.8	2605.4	2394.8	2164.2	2002.6	1828.3	1761.2	1724.9	1730.3
10°	3090.2	2988.5	2770.7	2449.2	2107.9	1793.9	1563.2	1374.4	1301.8	1270.9	1270.9
12.5°	3182.7	3057.5	2738.0	2255.0	1793.9	1418.0	1192.9	1105.7	1094.8	1094.8	1094.8
15°	3293.5	3141.0	2681.7	2026.2	1465.2	1122.1	1042.1	1045.8	1056.7	1063.9	1063.9
17.5°	3407.9	3230.0	2592.7	1770.2	1174.8	1009.5	1011.3	1016.7	1025.8	1033.1	1033.1
20°	3531.3	3319.0	2474.7	1497.8	1007.7	976.8	982.3	987.7	995.0	998.6	1000.4
22.5°	3663.9	3402.5	2334.8	1231.0	951.4	949.6	951.4	956.8	965.9	965.9	969.5
25°	3805.5	3495.0	2175.2	1036.7	922.3	922.3	926.0	929.6	936.8	936.8	938.7
27.5°	3950.8	3580.4	2006.2	935.0	896.9	895.1	895.1	900.6	904.2	906.0	907.8
30°	4110.6	3680.3	1837.4	913.3	877.0	867.9	862.4	866.0	869.7	871.5	875.1
32.5°	4273.9	3776.5	1686.7	922.3	857.0	840.6	822.5	818.9	818.9	826.2	831.6
35°	4455.5	3881.8	1570.5	953.1	846.0	800.7	771.6	755.3	757.1	768.0	773.5
37.5°	4673.4	4008.9	1485.1	980.4	838.9	755.3	708.1	688.1	675.4	688.1	684.5
40°	4958.4	4195.8	1423.4	1002.2	829.7	702.6	639.1	606.4	582.8	590.1	586.4
42.5°	5377.9	4490.0	1399.8	1004.0	809.7	640.9	568.3	524.7	490.3	492.0	484.7
45°	5966.1	4954.8	1521.5	980.4	766.2	573.7	493.8	435.7	414.0	408.5	401.3
47.5°	6772.3	5632.1	1802.9	931.4	702.6	508.4	421.2	372.2	355.9	346.8	341.3
50°	7852.5	6501.7	2115.2	877.0	639.1	446.6	361.3	330.5	319.6	310.5	308.6
52.5°	9105.3	7384.1	2371.2	822.5	575.5	392.2	323.2	305.0	295.9	288.6	286.9
55°	10254.6	7992.3	2356.7	764.3	513.8	348.6	295.9	285.1	274.2	266.9	263.2
57.5°	10970.0	8077.7	1942.7	700.8	443.0	314.1	270.5	263.2	250.5	241.5	239.6
60°	11298.6	7591.0	1361.7	617.4	372.2	281.5	243.3	239.6	223.3	210.6	206.9
62.5°	11358.5	6686.9	907.8	513.8	310.5	250.5	216.1	210.6	188.8	167.1	156.1
65°	11115.2	5394.2	628.2	401.3	265.1	217.9	185.2	174.2	150.7	128.9	121.7
67.5°	10345.3	3787.4	437.6	288.6	225.1	172.5	147.1	143.4	125.3	107.1	101.7
70°	8934.6	2158.8	292.3	216.1	177.9	118.0	116.2	119.8	101.7	87.1	79.8
72.5°	6850.3	987.7	181.5	158.0	121.7	79.8	92.6	94.4	78.1	65.4	58.1
75°	4032.5	423.0	114.4	101.7	61.7	52.7	67.1	69.0	52.7	41.7	36.3
77.5°	1372.6	159.8	72.7	60.0	30.9	29.0	43.6	43.6	29.0	16.3	12.7
80°	312.3	60.0	36.3	23.6	14.6	12.7	14.6	12.7	7.3	1.8	0.0
82.5°	89.0	23.6	14.6	9.1	5.4	5.4	1.8	0.0	0.0	0.0	0.0
85°	25.4	10.9	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.9	1.8	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)