

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: P967116

Luminaire Tested: **NAV-SB4D-722-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967116
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-SB4D-722-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 900mA 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: 28750.2 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

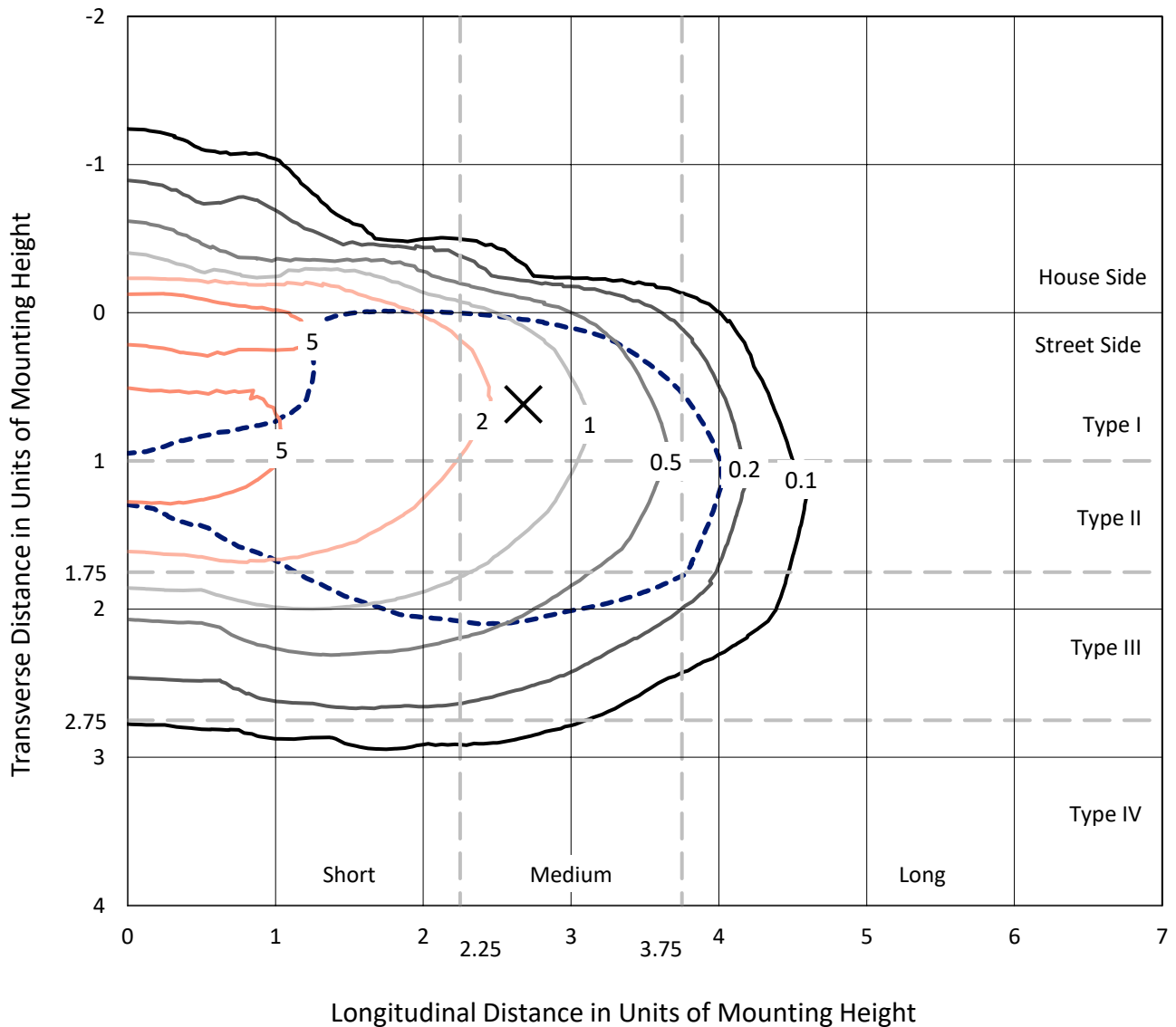
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

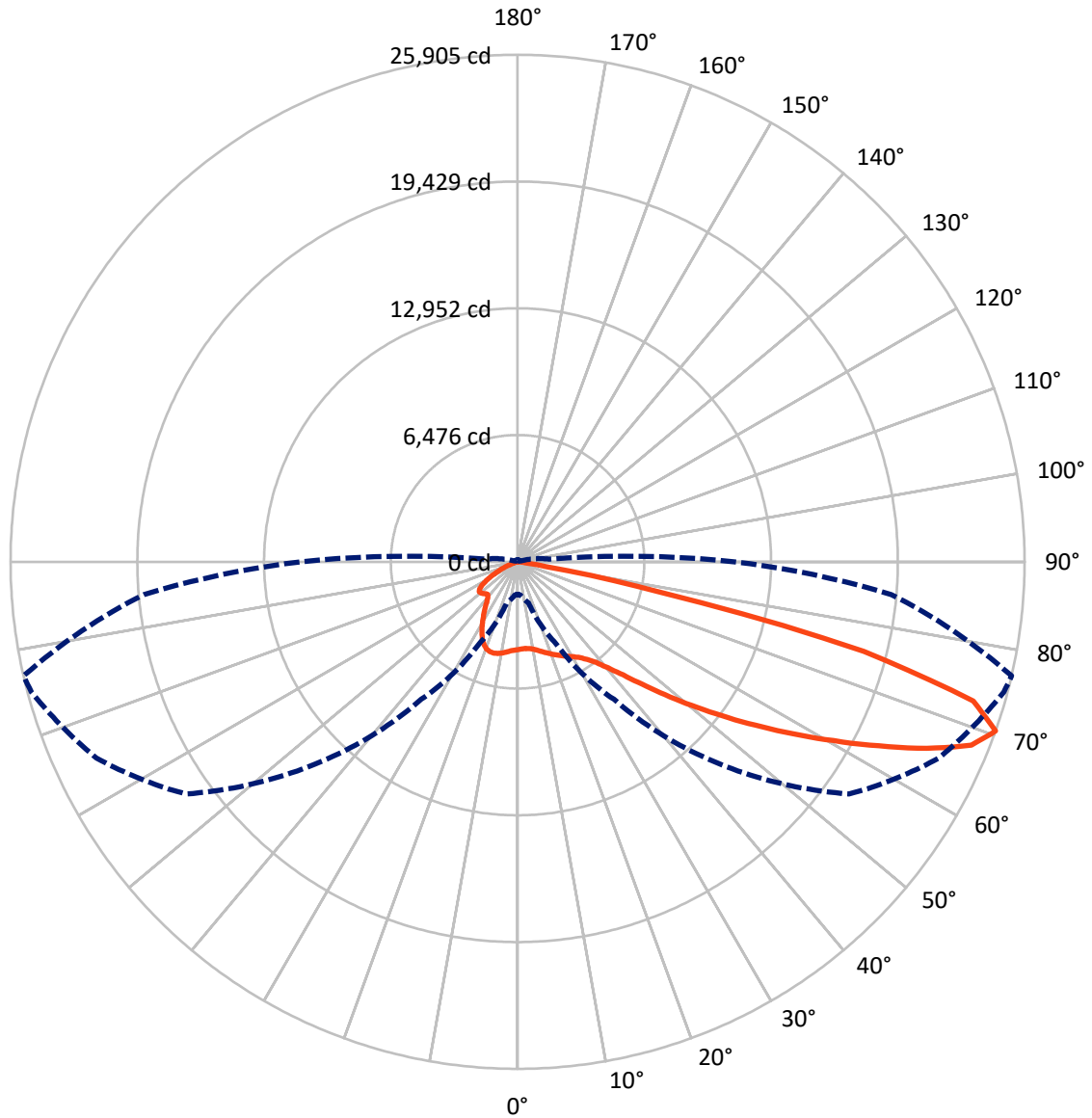
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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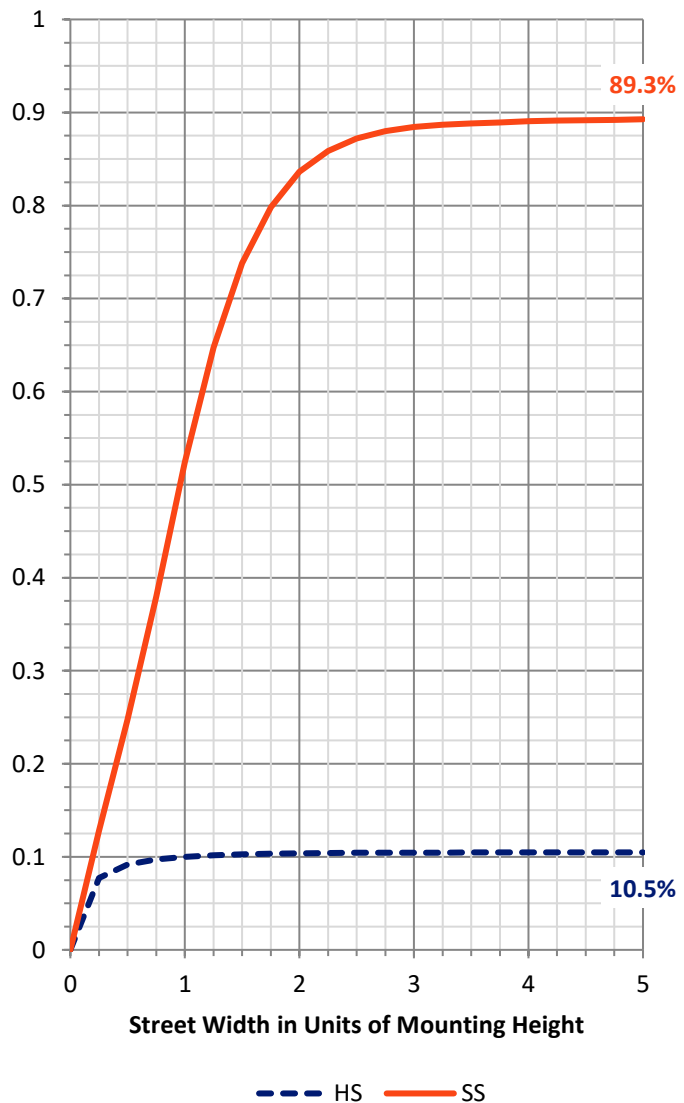
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3030.7	0.0	3030.7
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	25719.5	0.0	25719.5
	% Fixture	89.5	0.0	89.5
Total	Lumens	28750.2	0.0	28750.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	386.5	1.3
10°-20°	917.5	3.2
20°-30°	1419.1	4.9
30°-40°	2575.0	9.0
40°-50°	4860.7	16.9
50°-60°	7023.3	24.4
60°-70°	7476.1	26.0
70°-80°	3961.8	13.8
80°-90°	130.1	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°	28750.2	100.0
0°-180°	28750.2	100.0

Coefficient of Utilization

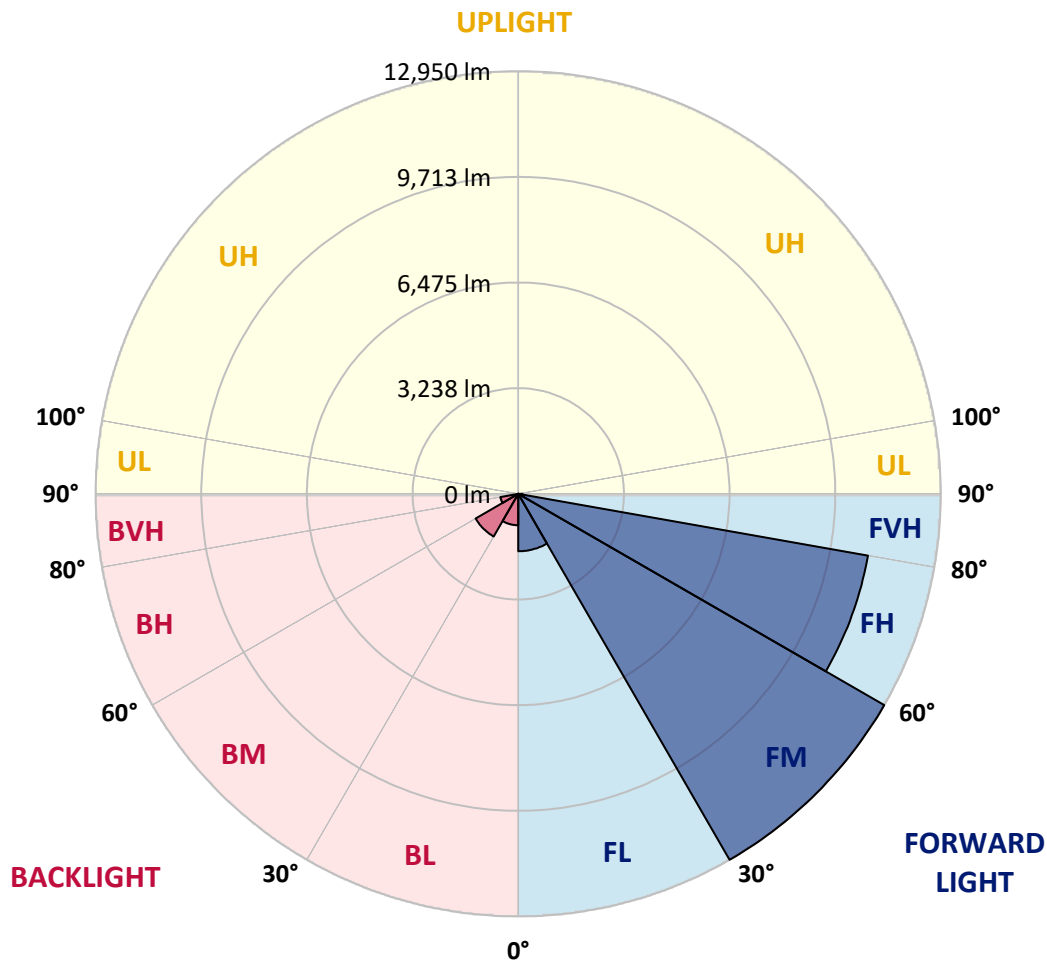


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1760.2	6.1			
FM (30°-60°)	12950.4	45.0			
FH (60°-80°)	10882.4	37.9			G4/12000
FVH (80°-90°)	126.6	0.4			G2/225
BL (0°-30°)	962.9	3.3	B2/1000		
BM (30°-60°)	1508.7	5.2	B2/2500		
BH (60°-80°)	555.6	1.9	B2/1000		G2/1000
BVH (80°-90°)	3.5	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4484.5	4484.5	4484.5	4484.5	4484.5	4484.5	4484.5	4484.5	4484.5	4484.5	4484.5
2.5°	4210.4	4248.5	4243.1	4268.5	4277.5	4313.8	4350.2	4399.2	4453.6	4451.9	4488.2
5°	3972.5	4010.6	4019.7	4054.2	4097.7	4154.1	4228.5	4326.5	4428.2	4444.6	4517.2
7.5°	3691.1	3731.0	3754.7	3823.7	3903.5	4019.7	4141.4	4284.8	4453.6	4477.3	4617.0
10°	3409.7	3445.9	3476.9	3574.9	3702.0	3874.5	4072.3	4279.4	4506.3	4540.8	4738.7
12.5°	3235.4	3269.9	3304.4	3389.7	3547.6	3758.3	4027.0	4304.8	4593.4	4642.4	4903.9
15°	3173.7	3204.6	3231.7	3308.0	3455.1	3694.7	4017.9	4357.4	4704.2	4769.5	5103.7
17.5°	3182.7	3199.0	3217.3	3275.3	3418.8	3665.7	4034.3	4448.2	4834.9	4893.0	5303.3
20°	3235.4	3244.4	3246.3	3286.3	3413.4	3662.0	4066.9	4535.3	4958.3	5036.4	5501.3
22.5°	3302.6	3306.2	3302.6	3329.8	3447.8	3689.3	4110.5	4640.7	5096.4	5169.0	5700.9
25°	3616.7	3547.6	3460.5	3407.9	3505.9	3742.0	4175.8	4782.2	5247.1	5317.9	5895.2
27.5°	4591.6	4393.8	4081.4	3731.0	3625.7	3818.2	4266.7	4925.7	5399.6	5463.1	6104.0
30°	6174.8	5915.2	5385.0	4595.3	4010.6	3977.9	4384.6	5069.1	5561.1	5630.1	6327.3
32.5°	7761.7	7698.2	7086.2	5993.3	4876.6	4333.8	4580.7	5263.4	5775.4	5829.9	6628.8
35°	9366.7	9237.7	8736.6	7656.3	6211.2	5058.3	4907.6	5517.6	6056.8	6118.5	7068.1
37.5°	10595.8	10517.7	10207.3	9317.7	7794.3	6176.6	5466.7	5911.6	6465.3	6534.3	7630.9
40°	11681.5	11645.2	11540.0	10953.5	9564.6	7640.0	6336.4	6521.6	7031.8	7113.5	8320.8
42.5°	12534.8	12620.2	12680.1	12516.7	11389.2	9310.4	7505.7	7378.6	7821.6	7905.1	9199.6
45°	13408.1	13437.2	13678.7	13914.7	13201.2	11057.0	8823.8	8382.6	8803.8	8907.4	10252.7
47.5°	13969.2	14085.3	14510.2	14925.9	14724.4	12789.0	10240.0	9568.2	9942.2	10136.4	11432.7
50°	14010.9	14230.6	14815.2	15539.6	15833.8	14437.6	11779.6	10919.0	11316.6	11530.8	12692.8
52.5°	13315.6	13656.9	14562.9	15623.2	16432.9	15833.8	13371.8	12269.8	12780.0	13059.5	14000.1
55°	10209.1	10655.7	13613.3	15169.3	16456.6	16892.3	14922.4	13676.9	14410.4	14726.3	15412.6
57.5°	8894.6	9119.7	10702.9	14381.4	16019.0	17318.9	16324.0	15016.8	16184.2	16576.4	16747.1
60°	7400.4	7696.3	8976.3	13092.2	15425.3	17360.7	17562.2	16745.2	18106.9	18548.1	17970.7
62.5°	5029.2	5350.6	6623.2	10877.2	14613.7	17340.7	18577.2	18524.5	20243.9	20717.7	19007.5
65°	3115.6	3317.1	4155.9	8881.9	13479.0	17362.5	19639.3	20685.0	22498.9	22980.0	19810.0
67.5°	2461.9	2554.5	2992.1	6819.3	11523.6	16872.3	20699.6	22716.7	24621.2	25002.5	20055.0
70°	1654.0	1710.3	2176.9	4571.7	8573.2	14610.0	20679.6	23737.1	25714.3	25904.9	19161.8
72.5°	871.5	915.0	1272.7	2116.9	5178.1	10385.2	17431.6	22517.0	24626.8	24339.9	16378.5
75°	435.7	508.4	857.0	1074.8	2211.4	5791.8	10824.6	17752.9	19383.3	18272.2	10508.6
77.5°	330.5	399.4	708.1	708.1	769.8	1950.0	4584.4	9682.6	8930.9	7436.7	3084.7
80°	210.6	272.3	619.1	535.6	321.3	495.7	1194.6	2712.5	1897.3	1443.4	561.0
82.5°	123.4	177.9	515.7	354.0	179.8	183.4	337.7	577.4	492.0	383.0	172.5
85°	49.0	116.2	354.0	139.8	70.8	45.4	101.7	123.4	101.7	76.3	43.6
87.5°	0.0	27.3	61.7	0.0	5.4	3.6	7.3	9.1	9.1	7.3	14.6
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°	4484.5	4484.5	4484.5	4484.5	4484.5	4484.5	4484.5	4484.5	4484.5	4484.5	4484.5
2.5°	4504.5	4508.2	4519.0	4520.9	4495.4	4462.7	4450.0	4444.6	4422.8	4420.9	4424.6
5°	4559.0	4575.3	4559.0	4511.7	4399.2	4241.2	4121.4	4023.3	3934.4	3907.2	3890.8
7.5°	4667.8	4684.2	4635.3	4450.0	4166.8	3852.7	3569.5	3369.8	3190.0	3122.9	3095.6
10°	4824.1	4845.8	4691.5	4317.5	3816.4	3311.7	2832.3	2494.6	2231.3	2124.2	2078.9
12.5°	5020.1	5029.2	4722.4	4116.0	3360.7	2639.9	1960.8	1599.5	1365.3	1278.2	1250.9
15°	5236.2	5223.5	4726.0	3841.8	2739.7	1866.4	1280.0	1051.2	956.8	927.7	927.7
17.5°	5463.1	5410.5	4653.4	3445.9	2058.9	1276.3	949.6	895.1	878.7	871.5	869.7
20°	5686.4	5568.4	4520.9	2928.5	1477.8	953.1	862.4	846.0	837.0	833.3	829.7
22.5°	5889.8	5688.2	4293.8	2327.6	1073.0	842.4	815.2	800.6	784.3	777.1	775.2
25°	6087.7	5757.2	3974.3	1766.6	858.7	787.9	766.2	738.9	717.2	708.1	704.5
27.5°	6280.2	5800.8	3574.9	1307.2	766.2	737.2	697.2	659.1	642.7	639.1	635.5
30°	6485.3	5815.3	3121.0	975.0	709.9	673.6	615.5	571.9	562.8	564.7	564.7
32.5°	6735.9	5837.2	2663.5	798.9	662.7	597.4	528.4	483.0	475.7	483.0	481.1
35°	7035.4	5880.7	2222.3	735.3	620.9	519.3	444.8	406.7	399.4	404.9	403.0
37.5°	7442.1	5951.6	1810.2	722.6	586.4	453.9	374.0	343.2	343.2	344.9	343.2
40°	7983.2	6140.4	1441.6	713.5	568.3	404.9	315.9	303.2	308.6	312.3	312.3
42.5°	8642.2	6541.5	1192.9	702.6	548.3	383.0	286.9	281.5	290.5	294.2	294.2
45°	9381.2	7050.0	1105.7	684.5	530.1	397.6	274.2	266.9	277.8	279.6	281.5
47.5°	10145.6	7547.4	1094.8	664.5	512.0	419.4	270.5	254.2	266.9	268.8	270.5
50°	10919.0	7872.4	1105.7	633.7	483.0	419.4	272.3	241.5	252.4	257.8	259.6
52.5°	11697.9	8021.3	1098.4	566.4	432.1	394.0	272.3	230.6	241.5	245.1	245.1
55°	12453.1	7992.2	987.7	466.6	366.7	348.6	265.1	221.5	228.8	230.6	230.6
57.5°	13050.5	7587.4	782.5	363.2	297.8	290.5	241.5	210.6	216.1	214.2	214.2
60°	13362.7	6697.8	559.2	279.6	234.2	228.8	212.4	196.1	199.7	190.6	188.8
62.5°	13366.4	5521.3	374.0	221.5	187.0	181.5	181.5	176.1	172.5	154.4	148.8
65°	13081.4	4215.8	248.8	176.1	150.7	141.7	152.5	150.7	138.0	112.5	109.0
67.5°	12435.0	2763.3	188.8	138.0	116.2	110.7	121.7	127.1	118.0	94.4	92.6
70°	11106.0	1608.6	156.1	107.1	87.1	81.7	98.1	109.0	98.1	76.3	72.7
72.5°	9225.0	867.9	127.1	79.8	60.0	54.4	78.1	89.0	78.1	56.3	54.4
75°	5986.0	464.8	98.1	52.7	30.9	34.5	58.1	65.4	54.4	36.3	32.7
77.5°	2009.8	205.2	61.7	25.4	14.6	14.6	34.5	40.0	25.4	12.7	10.9
80°	448.4	85.4	25.4	10.9	5.4	5.4	7.3	7.3	3.6	0.0	0.0
82.5°	147.1	34.5	10.9	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	56.3	12.7	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	21.8	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)