

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: P962941

Luminaire Tested: **NAV-SB2D-730-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962941
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-730-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17784.8 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

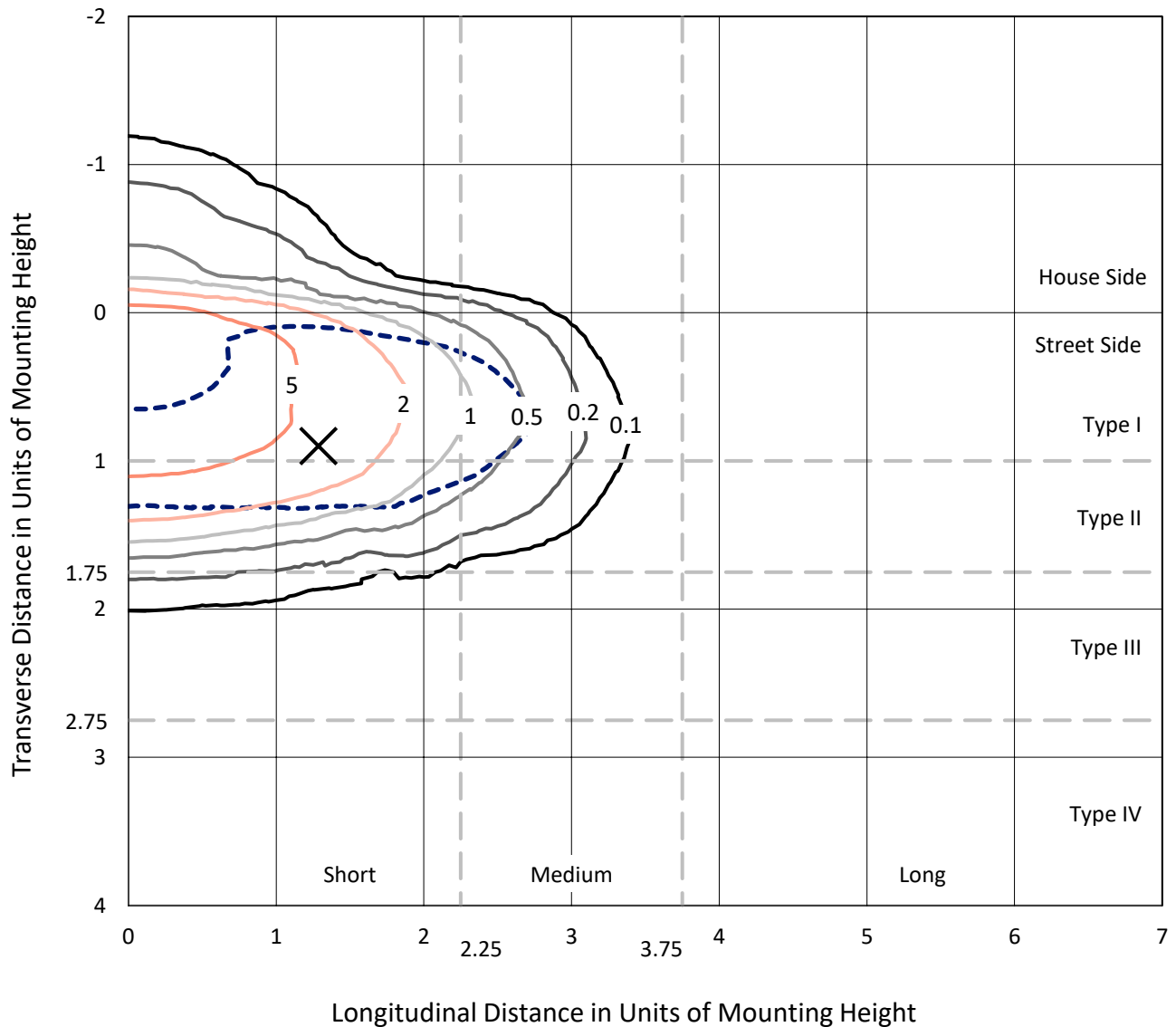
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

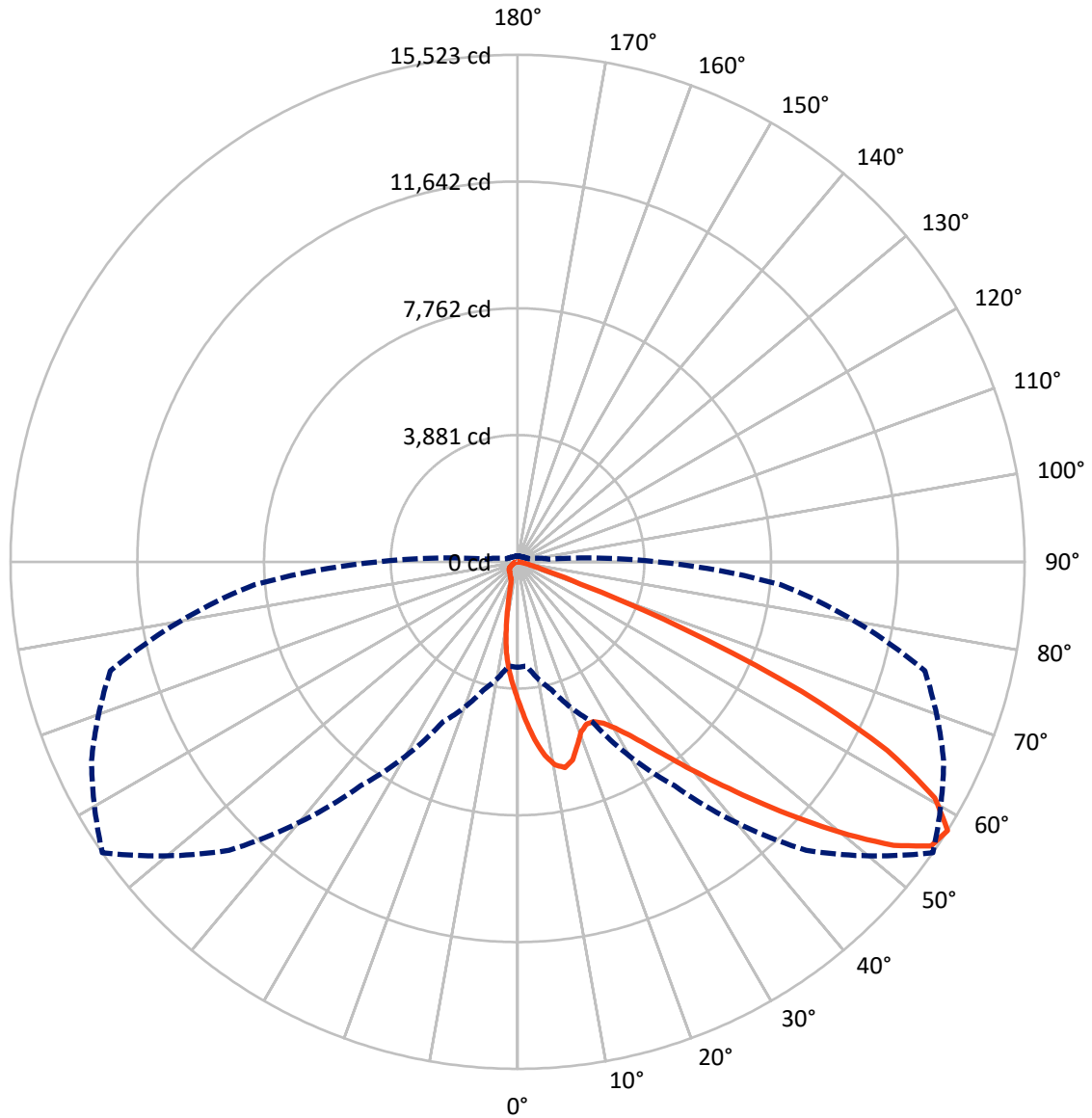
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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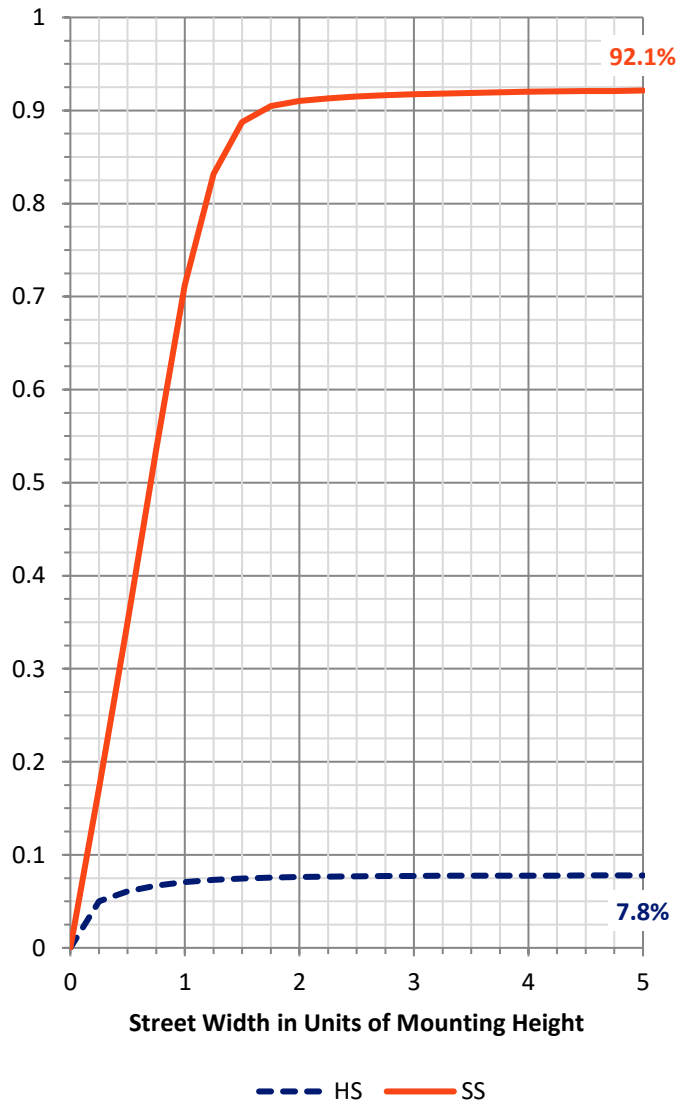
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1388.9	0.0	1388.9
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	16395.9	0.0	16395.9
	% Fixture	92.2	0.0	92.2
Total	Lumens	17784.8	0.0	17784.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	398.8	2.2
10°-20°	963.2	5.4
20°-30°	1541.1	8.7
30°-40°	2608.4	14.7
40°-50°	4282.5	24.1
50°-60°	4706.8	26.5
60°-70°	2699.8	15.2
70°-80°	551.7	3.1
80°-90°	32.5	0.2
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°	17784.8	100.0
0°-180°	17784.8	100.0

Coefficient of Utilization

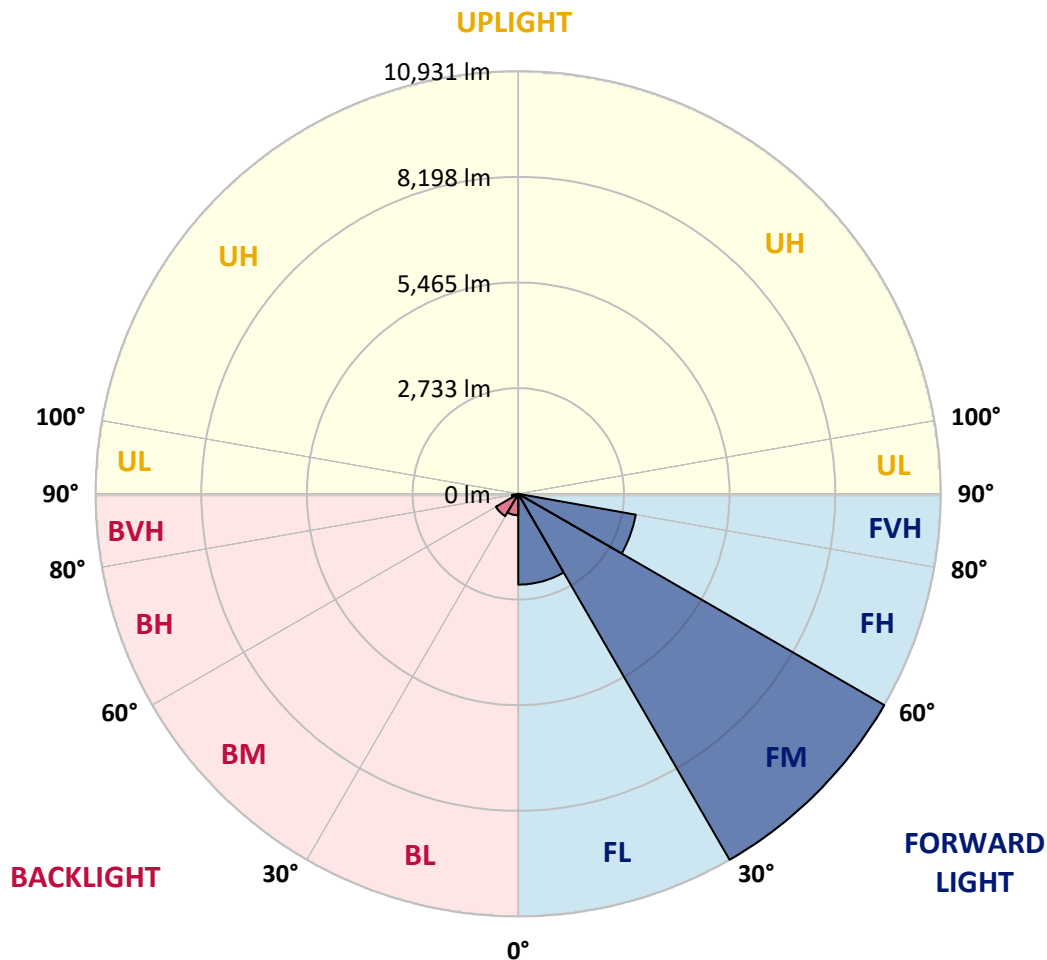


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2348.6	13.2			
FM (30°-60°)	10930.6	61.5			
FH (60°-80°)	3086.3	17.4			G2/5000
FVH (80°-90°)	30.3	0.2			G1/100
BL (0°-30°)	554.5	3.1	B2/1000		
BM (30°-60°)	667.1	3.8	B1/1000		
BH (60°-80°)	165.2	0.9	B1/500		G1/500
BVH (80°-90°)	2.2	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-G2
 Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4285.7	4285.7	4285.7	4285.7	4285.7	4285.7	4285.7	4285.7	4285.7	4285.7	4285.7
2.5°	5317.6	5250.8	5240.8	5227.7	5100.5	5005.1	4866.9	4715.6	4545.6	4372.3	4295.6
5°	6143.4	6090.8	6080.9	6019.5	5874.7	5712.4	5466.7	5156.5	4839.5	4466.6	4306.5
7.5°	6303.5	6293.6	6338.6	6336.4	6316.7	6188.3	5981.1	5611.6	5135.6	4582.9	4335.0
10°	5589.6	5614.8	5748.6	5866.0	6182.9	6367.1	6322.2	6017.3	5440.5	4715.6	4366.8
12.5°	4939.3	4909.6	5005.1	5137.8	5506.3	6054.6	6463.6	6356.1	5789.2	4865.8	4414.0
15°	4531.3	4519.3	4573.0	4634.4	4915.2	5467.9	6299.1	6631.4	6124.8	5043.5	4485.3
17.5°	4400.8	4391.0	4407.4	4422.8	4604.8	5032.5	5907.6	6800.3	6446.1	5246.4	4564.2
20°	4507.2	4494.0	4491.9	4479.8	4555.5	4847.2	5553.4	6812.4	6734.5	5430.6	4632.3
22.5°	4817.6	4802.2	4748.5	4700.2	4706.8	4872.4	5395.5	6691.7	6951.7	5602.8	4675.0
25°	5380.1	5354.9	5243.1	5080.7	4977.7	5047.8	5419.6	6532.7	7158.9	5737.6	4654.1
27.5°	6084.2	6051.3	5907.6	5666.4	5430.6	5345.1	5594.0	6423.1	7331.1	5840.8	4609.2
30°	6774.0	6731.2	6589.7	6402.3	6057.9	5788.1	5908.7	6471.3	7536.1	5948.2	4550.0
32.5°	7518.6	7478.0	7290.5	7058.0	6772.9	6409.9	6339.7	6707.1	7787.2	6098.4	4508.4
35°	8460.7	8397.0	8130.5	7813.6	7510.9	7143.5	6923.2	7113.9	8121.8	6327.6	4531.3
37.5°	9533.1	9447.6	9160.3	8722.8	8327.9	7916.7	7633.8	7673.3	8611.9	6634.7	4602.7
40°	10544.3	10466.4	10201.0	9788.6	9293.0	8794.0	8492.4	8404.7	9288.6	7008.6	4727.6
42.5°	11150.7	11080.6	10968.6	10794.3	10376.5	9867.6	9487.1	9297.4	10089.2	7456.1	4880.0
45°	11184.7	11123.3	11273.6	11476.4	11394.1	11055.2	10591.4	10243.7	10893.0	7876.1	5038.0
47.5°	10640.7	10599.1	11055.2	11763.7	12116.8	12259.4	11831.7	11111.2	11556.5	8177.7	5102.7
50°	9158.1	9142.7	10081.5	11382.1	12392.1	13314.3	13140.0	11918.4	12070.8	8333.5	5041.3
52.5°	7940.8	7884.9	8432.1	10160.4	11991.8	13869.3	14418.7	12710.1	12430.5	8363.0	4897.7
55°	6022.8	5973.4	6659.9	8116.3	10701.1	13671.9	15354.1	13527.1	12688.2	8287.3	4639.9
57.5°	3230.7	3200.0	4067.5	5402.1	8365.2	12487.5	15523.0	14391.3	12905.4	8086.6	4279.1
60°	1257.9	1252.3	1577.0	2621.0	5084.0	10159.3	14670.9	14910.0	13041.3	7839.9	3977.5
62.5°	761.1	777.6	830.1	1176.7	2246.0	6311.2	12706.8	14320.0	13132.3	7614.0	3728.6
65°	629.5	630.6	637.1	808.2	1075.8	2640.7	9566.0	12378.9	12907.5	7211.6	3375.4
67.5°	539.6	549.4	574.6	641.5	758.9	1158.0	5507.3	9589.1	11540.0	6275.0	2825.0
70°	425.5	438.7	470.5	527.5	585.6	724.9	2035.3	6380.3	8815.9	4729.9	2136.3
72.5°	358.6	357.5	373.9	428.8	464.9	509.9	783.0	3575.1	5123.6	2258.0	1057.2
75°	277.5	288.4	309.2	358.6	380.6	369.6	424.5	1306.1	1835.8	684.3	359.7
77.5°	217.1	225.9	244.6	292.8	314.8	262.1	244.6	467.2	590.0	245.7	162.3
80°	97.6	105.3	166.7	216.1	256.7	180.9	132.7	239.0	262.1	111.8	82.2
82.5°	17.5	29.6	97.6	114.1	131.6	117.4	69.1	123.9	128.3	45.0	28.5
85°	1.1	2.2	34.0	41.7	52.7	38.3	20.8	49.3	42.7	15.4	11.0
87.5°	0.0	0.0	0.0	1.1	1.1	5.4	6.6	8.8	6.6	5.4	4.4
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4285.7	4285.7	4285.7	4285.7	4285.7	4285.7	4285.7	4285.7	4285.7	4285.7
2.5°	4216.6	4060.8	3909.6	3785.6	3713.3	3590.4	3509.3	3496.1	3462.1	3491.8
5°	4135.5	3856.9	3575.1	3322.8	3115.6	2848.0	2648.4	2563.9	2490.4	2515.7
7.5°	4097.0	3657.3	3218.7	2787.7	2344.6	1917.0	1598.9	1466.3	1365.3	1379.5
10°	4045.6	3450.0	2762.5	2104.4	1511.2	1089.0	869.6	788.5	743.5	744.7
12.5°	4006.0	3202.2	2232.8	1426.7	920.0	695.3	627.3	607.5	594.4	595.5
15°	3986.3	2910.5	1709.7	950.8	657.9	588.9	572.5	563.6	554.9	553.8
17.5°	3953.4	2585.9	1251.3	694.1	575.7	551.7	537.4	527.5	516.5	514.3
20°	3904.0	2217.4	914.6	586.7	539.6	520.9	501.1	488.0	474.9	472.6
22.5°	3813.0	1828.1	702.9	542.8	513.2	492.4	468.2	452.9	439.7	437.6
25°	3644.2	1462.9	592.1	515.5	490.2	464.9	438.7	417.8	405.8	403.5
27.5°	3430.3	1149.3	537.4	490.2	460.6	437.6	408.0	388.2	377.2	375.0
30°	3178.1	885.0	505.5	461.7	425.5	405.8	379.5	363.0	356.4	356.4
32.5°	2906.1	707.4	492.4	433.2	394.8	372.9	352.0	345.4	343.3	342.1
35°	2650.5	614.1	485.8	410.1	367.4	346.6	337.7	338.9	343.3	343.3
37.5°	2423.6	584.6	482.6	393.7	343.3	324.6	330.0	340.0	335.6	335.6
40°	2218.5	587.8	480.3	381.6	323.5	312.5	323.5	315.8	304.8	303.8
42.5°	2061.7	615.2	475.9	371.8	311.5	303.8	299.4	287.3	286.2	288.4
45°	1947.6	639.4	474.9	367.4	298.3	284.0	278.6	266.5	288.4	293.9
47.5°	1812.7	639.4	474.9	352.0	276.3	270.9	262.1	249.0	270.9	276.3
50°	1638.4	598.8	456.2	334.5	258.8	255.5	240.2	223.8	219.4	222.6
52.5°	1418.0	525.3	409.1	310.4	241.3	234.7	216.1	204.0	200.7	200.7
55°	1166.9	439.7	345.4	275.2	222.6	210.5	197.4	191.9	188.6	186.4
57.5°	948.6	360.8	277.5	244.6	205.1	189.7	185.3	178.8	173.2	169.9
60°	778.6	284.0	229.2	217.1	187.6	173.2	172.2	163.4	149.1	147.0
62.5°	601.0	208.4	193.0	188.6	169.9	158.0	155.7	138.2	116.2	111.8
65°	424.5	162.3	155.7	165.6	151.3	140.3	134.9	108.5	85.6	82.2
67.5°	298.3	136.0	122.8	144.7	131.6	117.4	114.1	92.1	71.2	69.1
70°	212.8	110.8	100.9	123.9	105.3	103.1	96.6	76.8	58.1	56.0
72.5°	150.3	84.5	77.9	107.5	72.4	88.9	78.9	59.2	43.9	41.7
75°	110.8	60.3	54.8	62.5	52.7	66.9	56.0	39.5	27.4	26.3
77.5°	81.2	38.3	32.9	30.7	30.7	41.7	30.7	16.4	12.1	11.0
80°	57.0	17.5	15.4	13.1	12.1	9.8	4.4	2.2	1.1	1.1
82.5°	34.0	7.7	7.7	5.4	3.3	0.0	0.0	0.0	0.0	0.0
85°	7.7	3.3	3.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	1.1	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

(END OF REPORT)