

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: P959304

Luminaire Tested: **NAV-SB1A-735-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959304
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-SB1A-735-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3829.4 lumens
Efficiency: N/A
Efficacy: 123.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

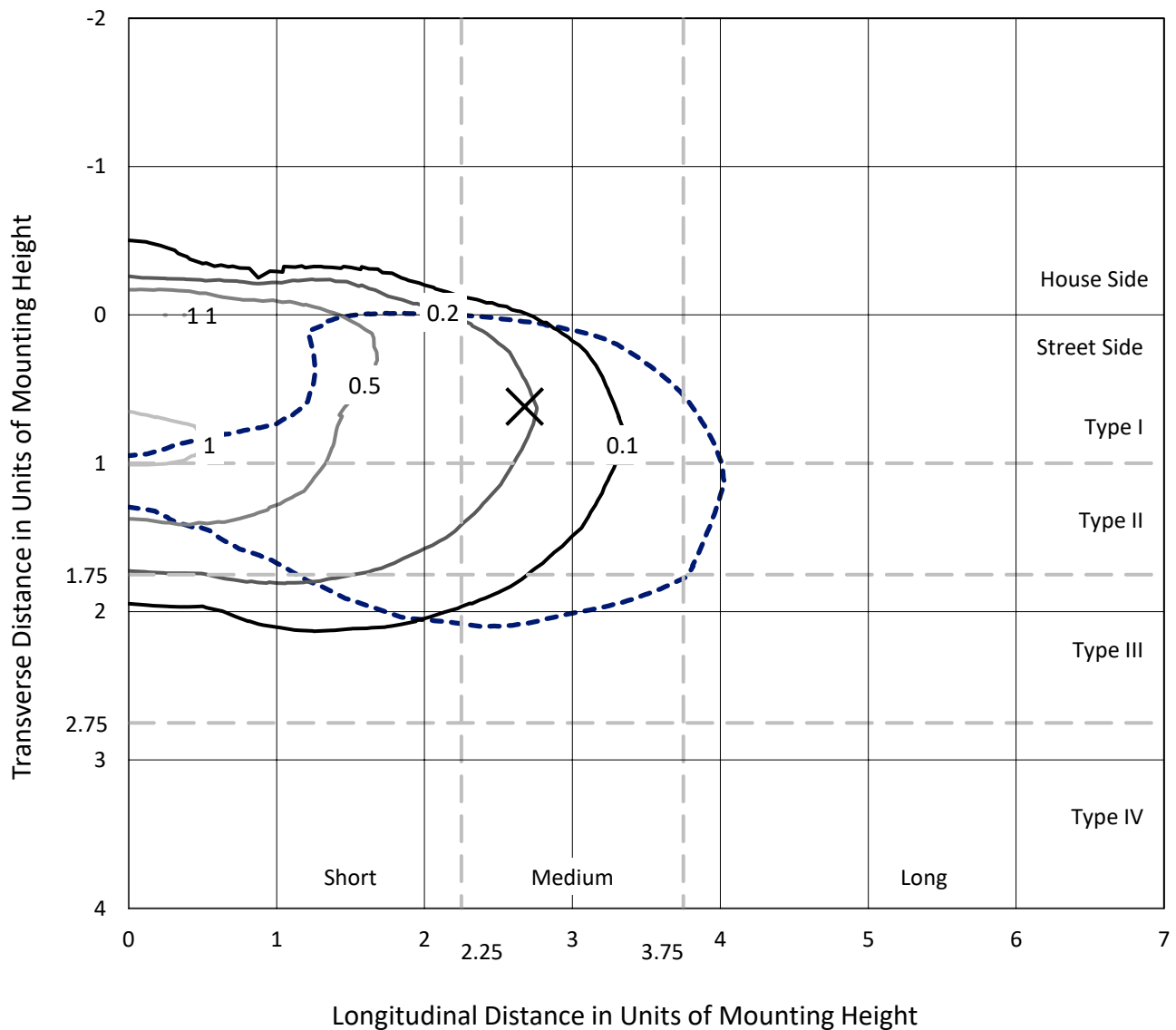
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

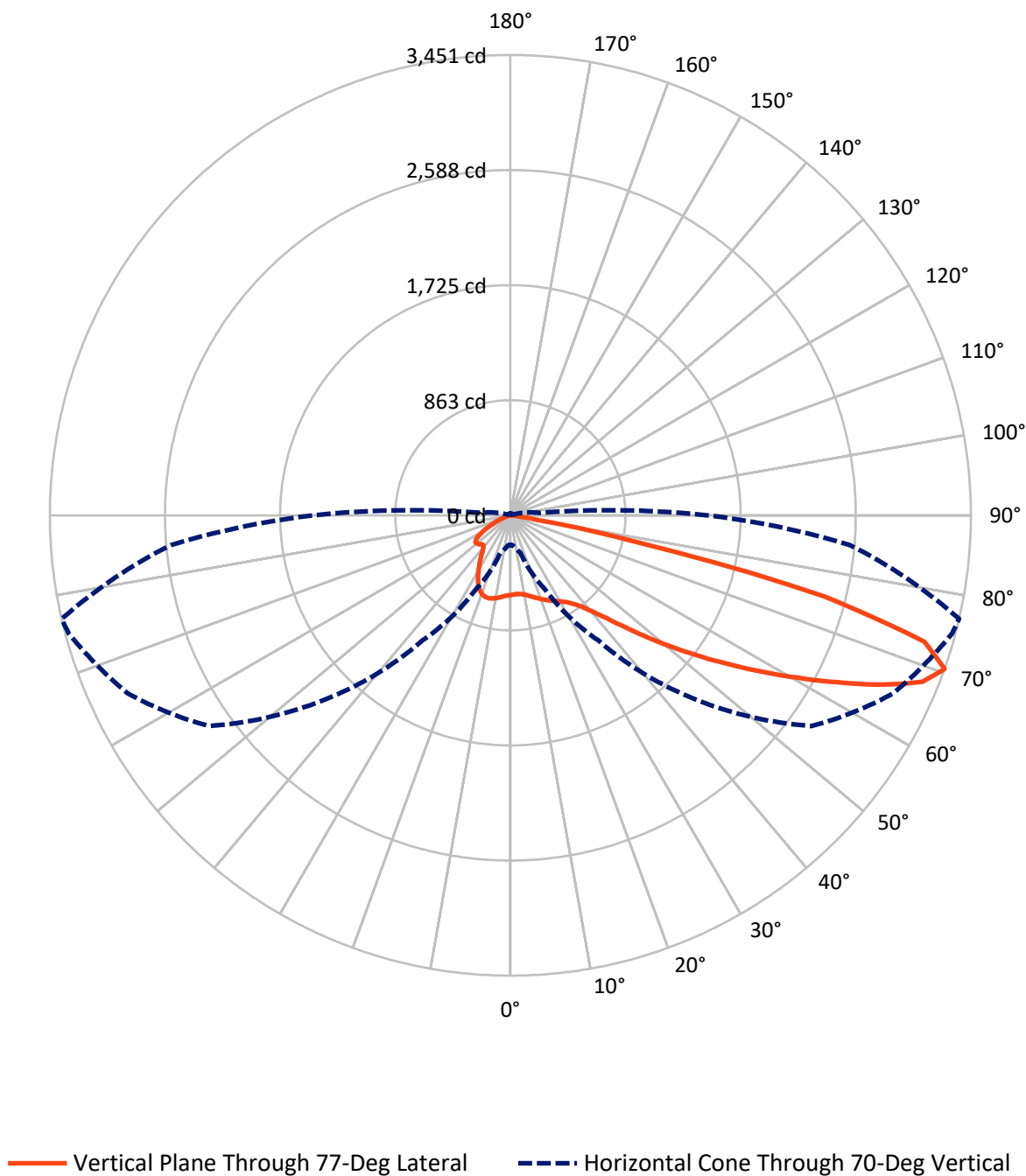
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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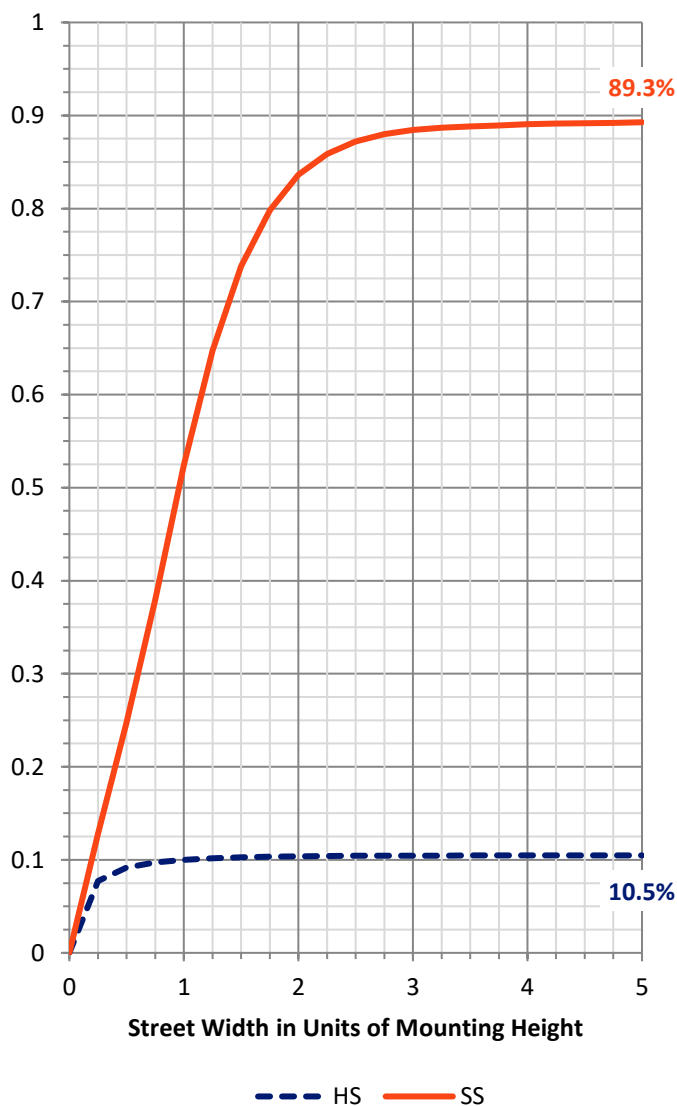
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	403.7	0.0	403.7
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	3425.7	0.0	3425.7
	% Fixture	89.5	0.0	89.5
Total	Lumens	3829.4	0.0	3829.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	1.3
10°-20°	122.2	3.2
20°-30°	189.0	4.9
30°-40°	343.0	9.0
40°-50°	647.4	16.9
50°-60°	935.5	24.4
60°-70°	995.8	26.0
70°-80°	527.7	13.8
80°-90°	17.3	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°	3829.4	100.0
0°-180°	3829.4	100.0

Coefficient of Utilization



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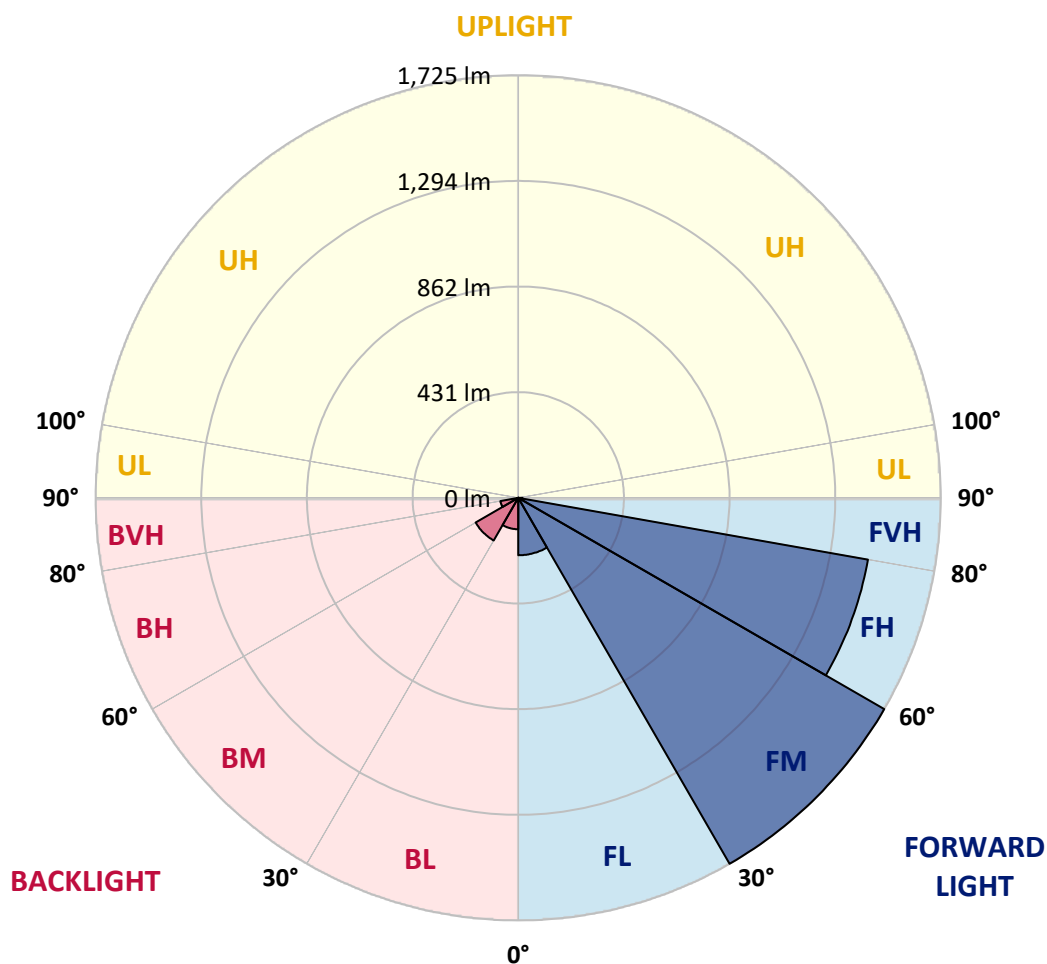
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	234.4	6.1			
FM	(30°-60°)	1724.9	45.0			
FH	(60°-80°)	1449.5	37.9			G1/1800
FVH	(80°-90°)	16.9	0.4			G1/100
BL	(0°-30°)	128.3	3.3	B1/500		
BM	(30°-60°)	201.0	5.2	B0/220		
BH	(60°-80°)	74.0	1.9	B0/110		G0/110
BVH	(80°-90°)	0.5	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3
2.5°	560.8	565.9	565.2	568.6	569.8	574.6	579.4	586.0	593.2	593.0	597.8
5°	529.1	534.2	535.5	540.0	545.8	553.3	563.2	576.3	589.8	592.0	601.7
7.5°	491.6	496.9	500.1	509.3	520.0	535.5	551.7	570.7	593.2	596.3	615.0
10°	454.2	459.0	463.1	476.1	493.1	516.1	542.4	570.0	600.2	604.9	631.2
12.5°	430.9	435.5	440.1	451.5	472.5	500.6	536.4	573.4	611.8	618.4	653.1
15°	422.7	426.8	430.5	440.6	460.2	492.1	535.2	580.4	626.6	635.3	679.8
17.5°	423.9	426.1	428.6	436.2	455.4	488.2	537.3	592.4	644.0	651.7	706.4
20°	430.9	432.1	432.3	437.7	454.6	487.8	541.7	604.1	660.4	670.9	732.8
22.5°	439.9	440.3	439.9	443.5	459.2	491.4	547.5	618.1	678.9	688.5	759.3
25°	481.7	472.5	460.9	453.9	467.0	498.5	556.2	636.9	698.8	708.3	785.3
27.5°	611.6	585.3	543.7	496.9	483.0	508.6	568.3	656.1	719.2	727.6	813.0
30°	822.5	787.9	717.3	612.0	534.2	529.8	584.0	675.2	740.8	749.9	842.8
32.5°	1033.8	1025.3	943.8	798.3	649.5	577.3	610.2	701.1	769.3	776.5	882.9
35°	1247.6	1230.4	1163.7	1019.8	827.3	673.7	653.6	734.9	806.8	815.0	941.5
37.5°	1411.3	1400.9	1359.6	1241.1	1038.1	822.7	728.2	787.4	861.1	870.3	1016.4
40°	1555.9	1551.1	1537.1	1459.0	1274.0	1017.6	844.0	868.7	936.6	947.5	1108.3
42.5°	1669.6	1681.0	1688.9	1667.2	1517.0	1240.1	999.7	982.8	1041.8	1052.9	1225.4
45°	1785.9	1789.8	1821.9	1853.4	1758.4	1472.7	1175.3	1116.5	1172.6	1186.4	1365.6
47.5°	1860.6	1876.1	1932.7	1988.1	1961.2	1703.4	1363.9	1274.5	1324.3	1350.1	1522.8
50°	1866.2	1895.4	1973.3	2069.8	2109.0	1923.0	1569.0	1454.4	1507.4	1535.9	1690.6
52.5°	1773.6	1819.1	1939.7	2081.0	2188.8	2109.0	1781.0	1634.3	1702.2	1739.4	1864.8
55°	1359.8	1419.3	1813.2	2020.5	2192.0	2250.0	1987.6	1821.7	1919.4	1961.4	2052.9
57.5°	1184.7	1214.7	1425.6	1915.5	2133.6	2306.8	2174.3	2000.2	2155.7	2207.8	2230.6
60°	985.7	1025.1	1195.6	1743.8	2054.6	2312.4	2339.3	2230.4	2411.7	2470.6	2393.6
62.5°	669.8	712.7	882.2	1448.8	1946.5	2309.7	2474.4	2467.4	2696.4	2759.5	2531.8
65°	415.0	441.8	553.5	1183.1	1795.3	2312.6	2615.9	2755.2	2996.8	3060.9	2638.6
67.5°	327.9	340.3	398.5	908.4	1534.9	2247.3	2757.0	3025.8	3279.5	3330.2	2671.3
70°	220.3	227.8	290.0	609.0	1142.0	1946.0	2754.4	3161.7	3425.0	3450.5	2552.2
72.5°	116.0	121.9	169.5	282.0	689.7	1383.2	2321.8	2999.1	3280.2	3242.0	2181.5
75°	58.0	67.8	114.2	143.2	294.6	771.4	1441.8	2364.6	2581.8	2433.8	1399.7
77.5°	44.0	53.2	94.3	94.3	102.5	259.7	610.6	1289.7	1189.5	990.6	410.8
80°	28.1	36.3	82.5	71.3	42.8	66.0	159.1	361.3	252.7	192.3	74.7
82.5°	16.4	23.7	68.7	47.2	24.0	24.4	45.0	76.9	65.5	51.0	23.0
85°	6.6	15.5	47.2	18.7	9.4	6.0	13.5	16.4	13.5	10.1	5.8
87.5°	0.0	3.6	8.2	0.0	0.7	0.5	0.9	1.2	1.2	0.9	1.9
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°	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3	597.3
2.5°	599.9	600.4	601.9	602.2	598.8	594.4	592.8	592.0	589.1	588.9	589.4
5°	607.2	609.4	607.2	601.0	586.0	564.9	549.0	535.9	524.1	520.4	518.2
7.5°	621.8	623.9	617.4	592.8	555.0	513.1	475.4	448.8	424.9	415.9	412.4
10°	642.6	645.4	624.8	575.0	508.3	441.1	377.3	332.3	297.2	282.9	276.9
12.5°	668.6	669.8	629.0	548.3	447.6	351.6	261.2	213.1	181.8	170.3	166.7
15°	697.4	695.8	629.5	511.7	364.9	248.6	170.5	140.0	127.4	123.6	123.6
17.5°	727.6	720.7	619.8	459.0	274.2	170.0	126.5	119.2	117.1	116.0	115.8
20°	757.4	741.7	602.2	390.1	196.8	127.0	114.9	112.6	111.5	111.0	110.5
22.5°	784.5	757.7	571.9	310.1	142.9	112.2	108.5	106.6	104.4	103.5	103.2
25°	810.9	766.8	529.4	235.3	114.4	105.0	102.1	98.4	95.5	94.3	93.8
27.5°	836.5	772.6	476.1	174.1	102.1	98.2	92.9	87.7	85.6	85.1	84.7
30°	863.8	774.6	415.7	129.9	94.5	89.7	82.0	76.2	74.9	75.2	75.2
32.5°	897.2	777.5	354.8	106.4	88.3	79.5	70.4	64.4	63.3	64.4	64.1
35°	937.1	783.3	296.0	98.0	82.7	69.2	59.2	54.1	53.2	53.9	53.7
37.5°	991.3	792.7	241.1	96.2	78.1	60.5	49.8	45.7	45.7	45.9	45.7
40°	1063.3	817.8	192.0	95.0	75.6	53.9	42.1	40.4	41.1	41.6	41.6
42.5°	1151.1	871.4	158.9	93.6	73.1	51.0	38.2	37.5	38.6	39.2	39.2
45°	1249.6	939.0	147.3	91.1	70.6	53.0	36.5	35.6	37.0	37.2	37.5
47.5°	1351.4	1005.3	145.9	88.6	68.2	55.9	36.1	33.8	35.6	35.8	36.1
50°	1454.4	1048.6	147.3	84.4	64.4	55.9	36.3	32.2	33.6	34.3	34.5
52.5°	1558.1	1068.4	146.3	75.4	57.6	52.5	36.3	30.7	32.2	32.7	32.7
55°	1658.7	1064.6	131.5	62.1	48.9	46.4	35.3	29.5	30.4	30.7	30.7
57.5°	1738.3	1010.6	104.2	48.4	39.7	38.6	32.2	28.1	28.8	28.5	28.5
60°	1779.8	892.1	74.5	37.2	31.2	30.4	28.3	26.1	26.6	25.4	25.1
62.5°	1780.3	735.4	49.8	29.5	24.9	24.2	24.2	23.5	23.0	20.6	19.8
65°	1742.4	561.5	33.1	23.5	20.1	18.9	20.3	20.1	18.3	15.0	14.6
67.5°	1656.3	368.1	25.1	18.3	15.5	14.8	16.2	16.9	15.7	12.6	12.3
70°	1479.3	214.2	20.8	14.2	11.6	10.9	13.0	14.6	13.0	10.1	9.6
72.5°	1228.8	115.6	16.9	10.7	8.0	7.3	10.4	11.9	10.4	7.5	7.3
75°	797.3	61.9	13.0	7.0	4.1	4.6	7.7	8.7	7.3	4.8	4.3
77.5°	267.7	27.4	8.2	3.4	1.9	1.9	4.6	5.3	3.4	1.7	1.4
80°	59.8	11.4	3.4	1.4	0.7	0.7	0.9	0.9	0.5	0.0	0.0
82.5°	19.6	4.6	1.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.5	1.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	0.2	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)