

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: P960017

Luminaire Tested: **NAV-SB1B-835-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960017
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-SB1B-835-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 450mA 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: 4458.7 lumens
Efficiency: N/A
Efficacy: 112.0 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): 39.8
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

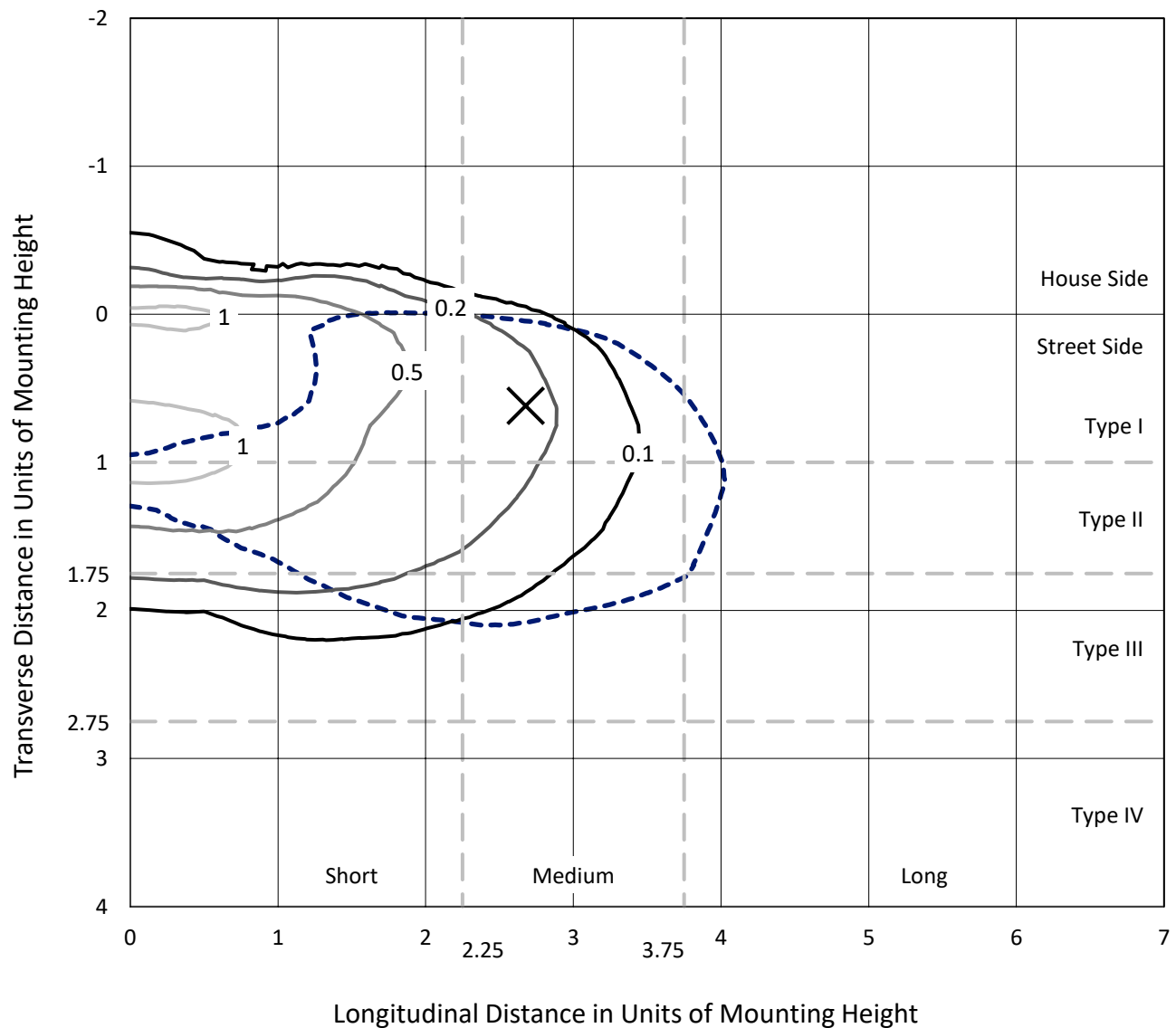


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Iso-Footcandle Lines of Horizontal Illumination

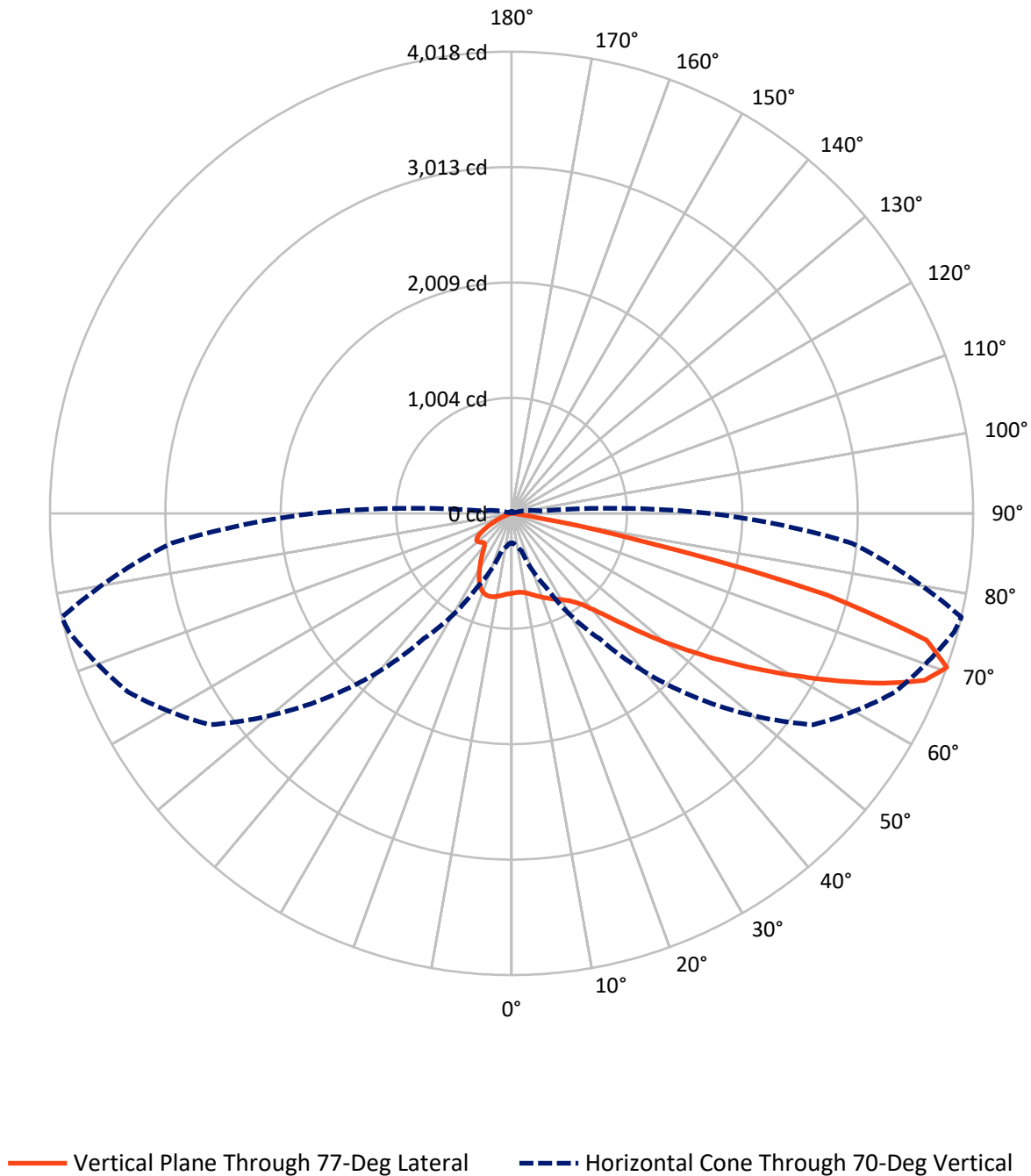
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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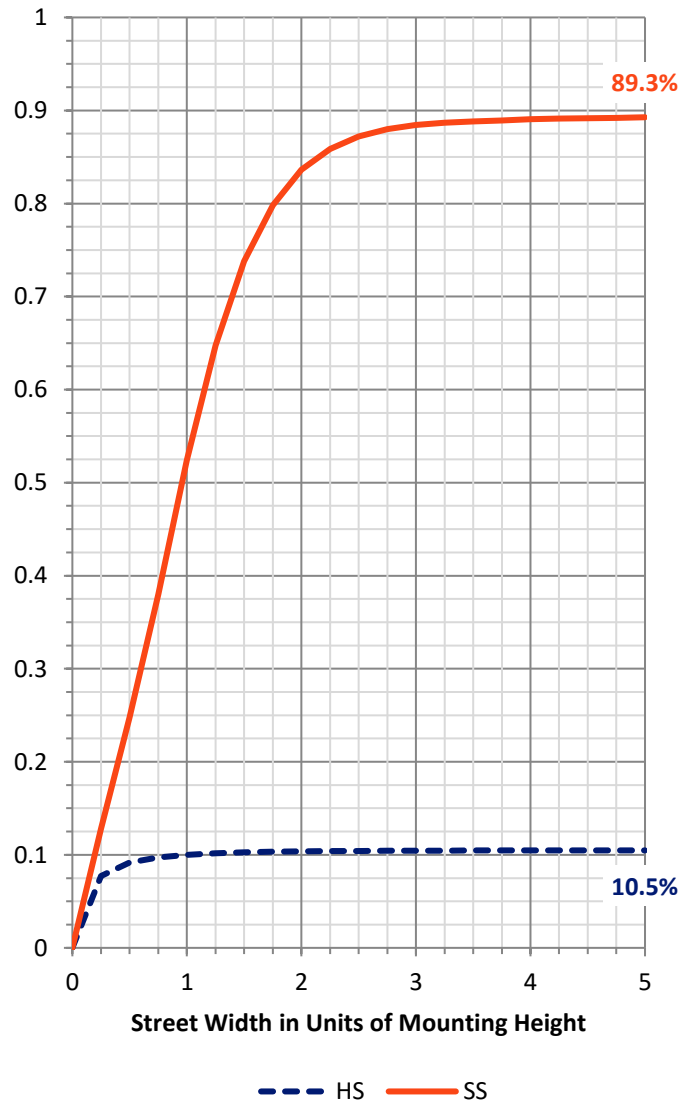
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	470.0	0.0	470.0
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	3988.7	0.0	3988.7
	% Fixture	89.5	0.0	89.5
Total	Lumens	4458.7	0.0	4458.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.9	1.3
10°-20°	142.3	3.2
20°-30°	220.1	4.9
30°-40°	399.4	9.0
40°-50°	753.8	16.9
50°-60°	1089.2	24.4
60°-70°	1159.4	26.0
70°-80°	614.4	13.8
80°-90°	20.2	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°	4458.7	100.0
0°-180°	4458.7	100.0

Coefficient of Utilization



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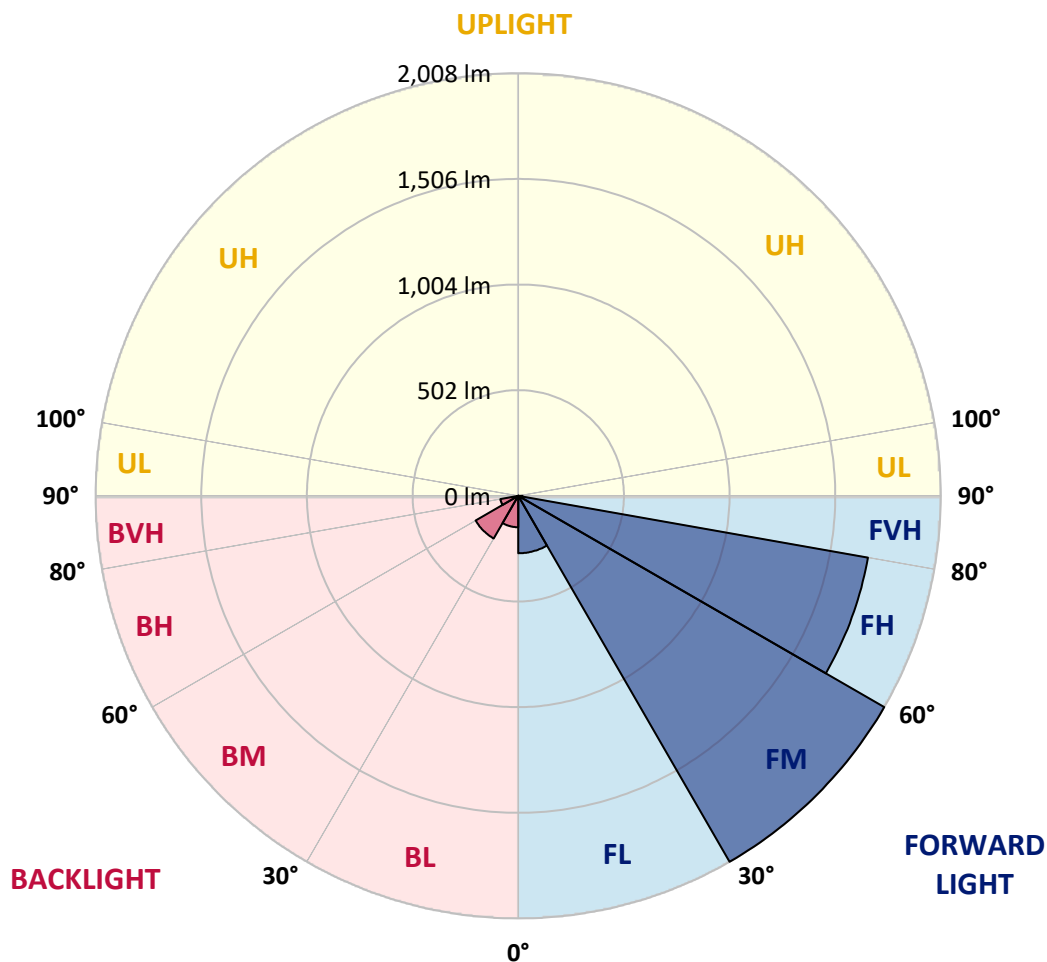
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	273.0	6.1			
FM	(30°-60°)	2008.4	45.0			
FH	(60°-80°)	1687.7	37.9			G1/1800
FVH	(80°-90°)	19.6	0.4			G1/100
BL	(0°-30°)	149.3	3.3	B1/500		
BM	(30°-60°)	234.0	5.2	B1/1000		
BH	(60°-80°)	86.2	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°	695.5	695.5	695.5	695.5	695.5	695.5	695.5	695.5	695.5	695.5	695.5
2.5°	652.9	658.9	658.0	661.9	663.4	669.0	674.7	682.2	690.7	690.4	696.1
5°	616.1	622.0	623.4	628.7	635.5	644.2	655.8	671.0	686.7	689.3	700.6
7.5°	572.5	578.6	582.3	593.0	605.4	623.4	642.3	664.5	690.7	694.3	716.1
10°	528.8	534.4	539.3	554.4	574.1	600.9	631.6	663.7	698.8	704.2	734.9
12.5°	501.7	507.1	512.5	525.7	550.2	582.8	624.5	667.6	712.4	720.0	760.6
15°	492.2	497.0	501.2	513.0	535.9	573.0	623.1	675.8	729.6	739.7	791.5
17.5°	493.6	496.1	499.0	508.0	530.2	568.5	625.7	689.8	749.8	758.8	822.5
20°	501.7	503.2	503.5	509.6	529.3	568.0	630.7	703.4	769.0	781.0	853.2
22.5°	512.2	512.7	512.2	516.4	534.7	572.2	637.4	719.7	790.4	801.7	884.2
25°	560.9	550.2	536.7	528.5	543.8	580.4	647.6	741.7	813.7	824.7	914.3
27.5°	712.1	681.4	632.9	578.6	562.3	592.1	661.7	763.9	837.4	847.3	946.7
30°	957.7	917.4	835.2	712.7	622.0	616.9	680.0	786.2	862.4	873.2	981.2
32.5°	1203.8	1193.8	1099.0	929.5	756.3	672.1	710.4	816.3	895.6	904.2	1028.0
35°	1452.6	1432.6	1354.9	1187.4	963.3	784.4	761.1	855.7	939.3	948.9	1096.1
37.5°	1643.3	1631.2	1583.0	1445.0	1208.8	957.9	847.8	916.8	1002.7	1013.4	1183.5
40°	1811.7	1806.0	1789.6	1698.7	1483.3	1184.9	982.7	1011.4	1090.5	1103.2	1290.5
42.5°	1944.0	1957.2	1966.5	1941.1	1766.3	1443.9	1164.0	1144.3	1213.0	1226.0	1426.7
45°	2079.4	2083.9	2121.3	2157.9	2047.3	1714.8	1368.5	1300.0	1365.3	1381.4	1590.1
47.5°	2166.4	2184.5	2250.3	2314.9	2283.6	1983.4	1588.0	1483.9	1541.9	1572.0	1773.0
50°	2172.9	2206.9	2297.6	2410.0	2455.6	2239.1	1826.9	1693.4	1755.0	1788.3	1968.5
52.5°	2065.1	2118.0	2258.5	2422.9	2548.6	2455.6	2073.8	1902.9	1981.9	2025.4	2171.3
55°	1583.3	1652.5	2111.2	2352.6	2552.1	2619.8	2314.2	2121.1	2234.8	2283.8	2390.3
57.5°	1379.4	1414.3	1659.9	2230.3	2484.3	2685.9	2531.6	2328.9	2509.9	2570.8	2597.2
60°	1147.7	1193.6	1392.1	2030.4	2392.2	2692.4	2723.6	2596.9	2808.1	2876.6	2787.0
62.5°	779.9	829.8	1027.2	1686.9	2266.4	2689.3	2881.1	2872.9	3139.6	3213.1	2947.8
65°	483.2	514.4	644.5	1377.5	2090.4	2692.7	3045.8	3207.9	3489.2	3563.8	3072.2
67.5°	381.8	396.2	464.0	1057.6	1787.2	2616.6	3210.2	3523.0	3818.4	3877.6	3110.3
70°	256.6	265.3	337.6	709.0	1329.6	2265.9	3207.1	3681.3	3987.9	4017.5	2971.7
72.5°	135.2	142.0	197.4	328.3	803.1	1610.6	2703.3	3492.1	3819.3	3774.8	2540.1
75°	67.5	78.8	132.9	166.7	343.0	898.2	1678.7	2753.3	3006.1	2833.7	1629.7
77.5°	51.2	61.9	109.8	109.8	119.4	302.4	710.9	1501.6	1385.1	1153.3	478.4
80°	32.7	42.2	96.0	83.0	49.8	76.9	185.3	420.7	294.3	223.9	87.0
82.5°	19.2	27.6	79.9	54.9	27.9	28.4	52.4	89.6	76.3	59.4	26.8
85°	7.6	18.0	54.9	21.7	11.0	7.1	15.8	19.2	15.8	11.8	6.8
87.5°	0.0	4.2	9.5	0.0	0.8	0.5	1.1	1.4	1.4	1.1	2.3
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°	695.5	695.5	695.5	695.5	695.5	695.5	695.5	695.5	695.5	695.5	695.5
2.5°	698.5	699.2	700.8	701.1	697.2	692.1	690.1	689.3	685.9	685.6	686.2
5°	707.0	709.6	707.0	699.7	682.2	657.7	639.2	623.9	610.2	606.0	603.4
7.5°	724.0	726.4	718.8	690.1	646.2	597.5	553.6	522.6	494.8	484.3	480.1
10°	748.1	751.5	727.5	669.5	591.8	513.6	439.2	386.8	346.0	329.4	322.4
12.5°	778.6	779.9	732.4	638.4	521.2	409.4	304.1	248.0	211.8	198.2	194.0
15°	812.0	810.1	733.0	595.8	424.9	289.5	198.5	163.1	148.4	143.9	143.9
17.5°	847.3	839.1	721.7	534.4	319.3	197.9	147.3	138.8	136.3	135.2	134.9
20°	881.9	863.6	701.1	454.2	229.2	147.8	133.8	131.2	129.8	129.3	128.6
22.5°	913.4	882.2	665.9	361.0	166.5	130.7	126.4	124.1	121.7	120.5	120.2
25°	944.1	892.9	616.3	274.0	133.1	122.2	118.8	114.6	111.2	109.8	109.3
27.5°	974.0	899.6	554.4	202.7	118.8	114.3	108.1	102.2	99.6	99.1	98.5
30°	1005.7	901.9	484.0	151.2	110.1	104.4	95.4	88.7	87.3	87.5	87.5
32.5°	1044.7	905.3	413.1	123.9	102.8	92.7	81.9	74.9	73.8	74.9	74.6
35°	1091.1	912.0	344.6	114.1	96.2	80.6	69.0	63.0	61.9	62.8	62.5
37.5°	1154.1	923.0	280.7	112.0	90.9	70.4	58.0	53.2	53.2	53.5	53.2
40°	1238.1	952.3	223.6	110.7	88.1	62.8	49.0	47.0	47.9	48.4	48.4
42.5°	1340.3	1014.5	185.0	109.0	85.1	59.4	44.5	43.7	45.1	45.6	45.6
45°	1454.9	1093.4	171.5	106.2	82.2	61.7	42.5	41.4	43.0	43.4	43.7
47.5°	1573.5	1170.4	169.7	103.0	79.4	65.1	41.9	39.5	41.4	41.7	41.9
50°	1693.4	1220.9	171.5	98.3	74.9	65.1	42.2	37.4	39.2	40.0	40.3
52.5°	1814.1	1243.9	170.4	87.8	67.0	61.1	42.2	35.8	37.4	38.0	38.0
55°	1931.3	1239.5	153.1	72.4	56.9	54.0	41.1	34.3	35.5	35.8	35.8
57.5°	2024.0	1176.7	121.4	56.3	46.2	45.1	37.4	32.7	33.5	33.2	33.2
60°	2072.3	1038.7	86.7	43.4	36.3	35.5	32.9	30.4	31.0	29.5	29.3
62.5°	2073.0	856.3	58.0	34.3	29.0	28.2	28.2	27.3	26.8	23.9	23.1
65°	2028.7	653.8	38.5	27.3	23.4	21.9	23.7	23.4	21.4	17.4	16.9
67.5°	1928.5	428.6	29.3	21.4	18.0	17.2	18.9	19.7	18.3	14.7	14.3
70°	1722.4	249.5	24.2	16.6	13.5	12.7	15.2	16.9	15.2	11.8	11.3
72.5°	1430.7	134.6	19.7	12.4	9.3	8.4	12.1	13.8	12.1	8.7	8.4
75°	928.3	72.1	15.2	8.2	4.8	5.3	9.0	10.1	8.4	5.6	5.0
77.5°	311.7	31.8	9.5	3.9	2.3	2.3	5.3	6.1	3.9	1.9	1.6
80°	69.6	13.2	3.9	1.6	0.8	0.8	1.1	1.1	0.5	0.0	0.0
82.5°	22.9	5.3	1.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.7	1.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	0.3	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)