

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: P959986

Luminaire Tested: **NAV-SB1B-830-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959986
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-830-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 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: 4319.3 lumens
Efficiency: N/A
Efficacy: 108.5 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



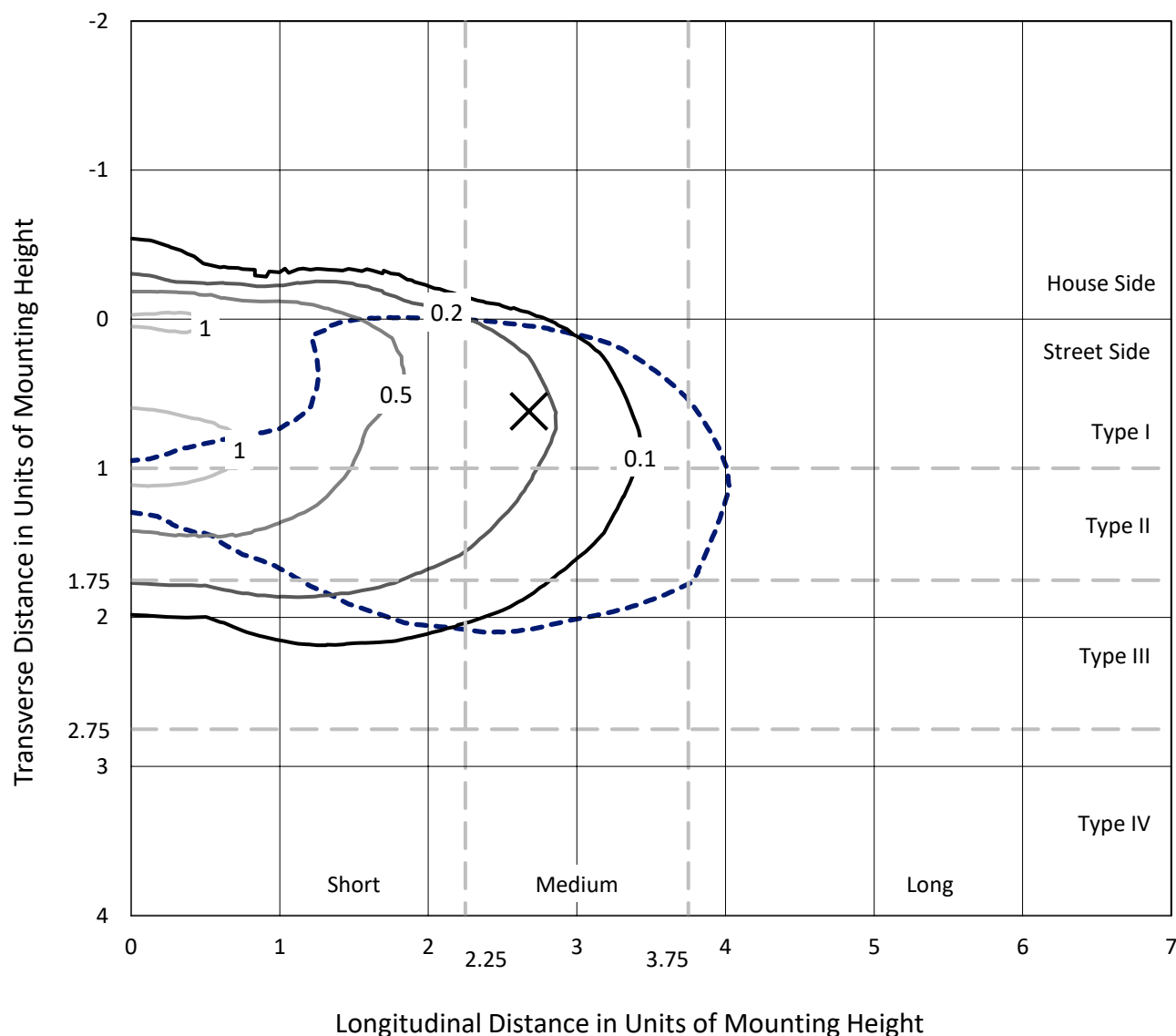
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

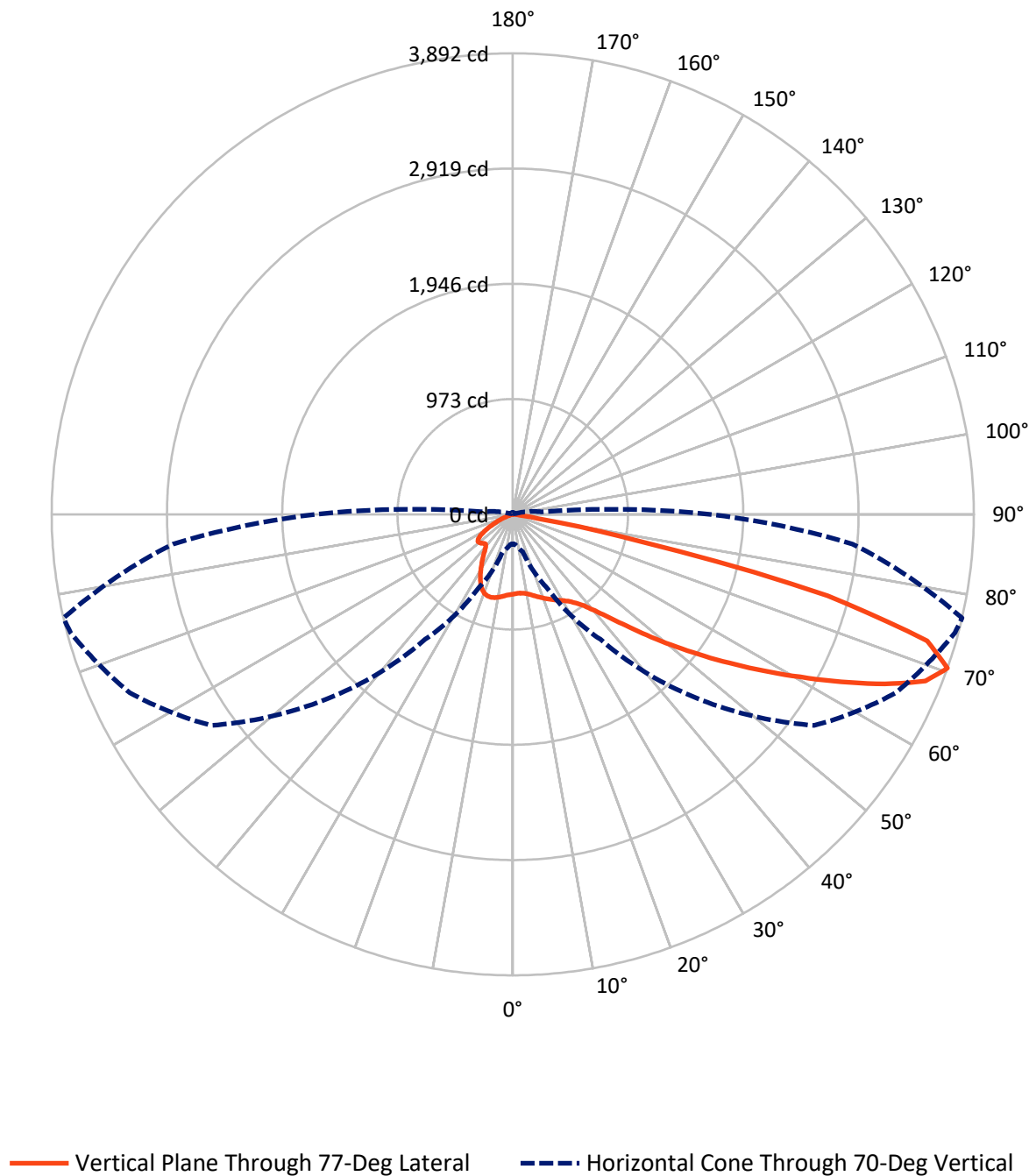


Based on 25 foot mounting height. Maximum calculated value = 1.3 fc

Type III - Medium - N/A

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Luminous Intensity Polar Plot



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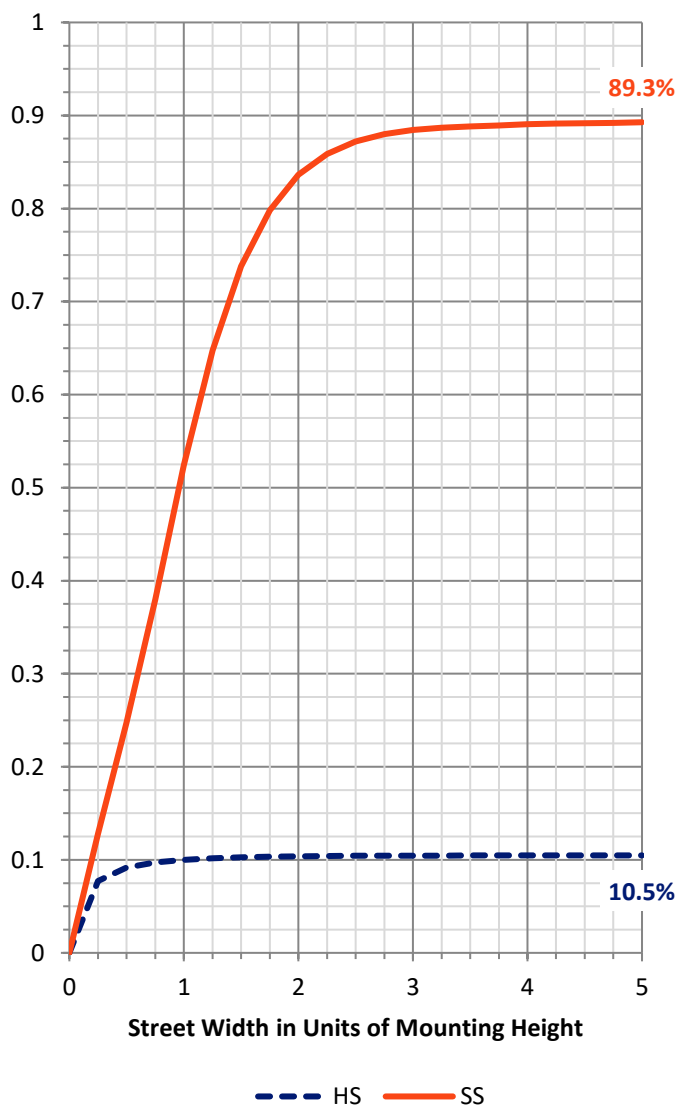
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	455.3	0.0	455.3
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	3864.0	0.0	3864.0
	% Fixture	89.5	0.0	89.5
Total	Lumens	4319.3	0.0	4319.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.3
10°-20°	137.8	3.2
20°-30°	213.2	4.9
30°-40°	386.9	9.0
40°-50°	730.3	16.9
50°-60°	1055.2	24.4
60°-70°	1123.2	26.0
70°-80°	595.2	13.8
80°-90°	19.5	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°	4319.3	100.0
0°-180°	4319.3	100.0

Coefficient of Utilization



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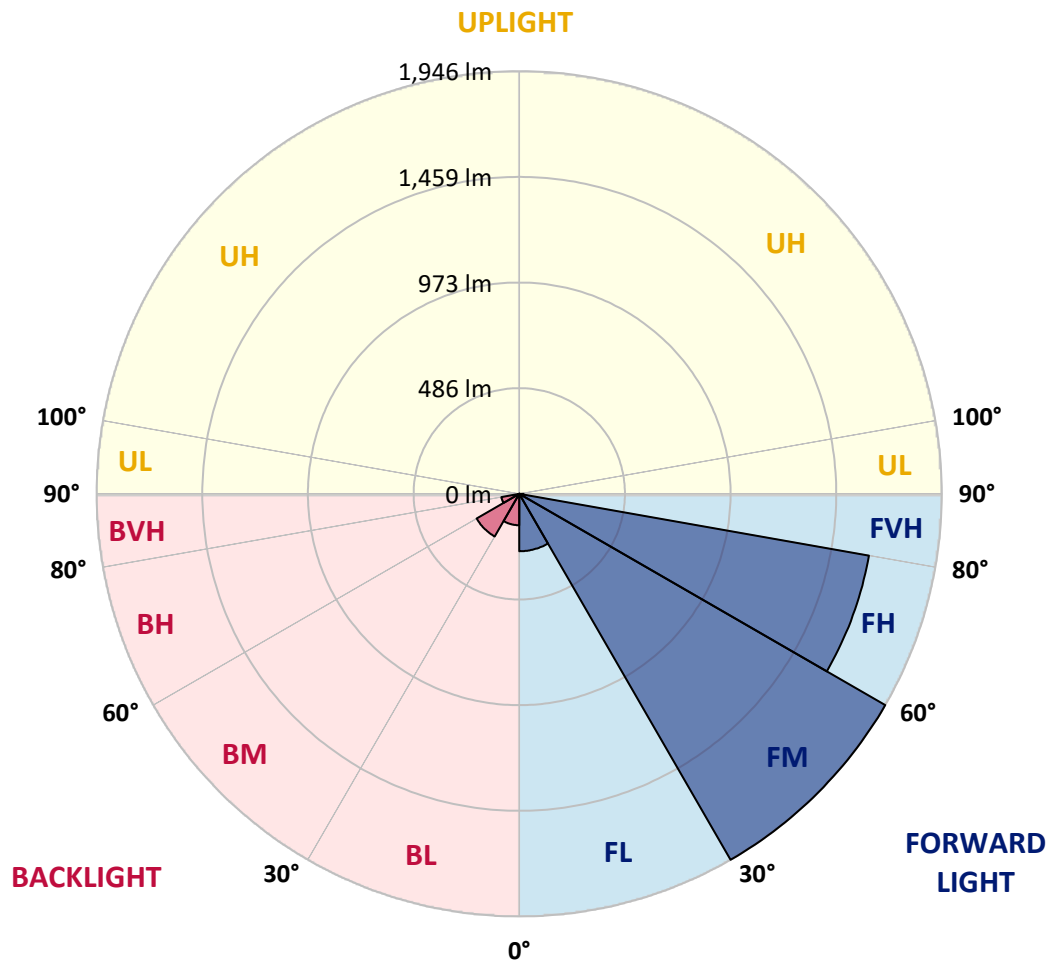
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	264.4	6.1			
FM	(30°-60°)	1945.6	45.0			
FH	(60°-80°)	1634.9	37.9			G1/1800
FVH	(80°-90°)	19.0	0.4			G1/100
BL	(0°-30°)	144.7	3.3	B1/500		
BM	(30°-60°)	226.7	5.2	B1/1000		
BH	(60°-80°)	83.5	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°	673.7	673.7	673.7	673.7	673.7	673.7	673.7	673.7	673.7	673.7	673.7
2.5°	632.5	638.3	637.4	641.2	642.7	648.1	653.5	660.9	669.1	668.8	674.2
5°	596.9	602.6	603.9	609.1	615.6	624.1	635.3	650.1	665.3	667.8	678.7
7.5°	554.5	560.6	564.1	574.4	586.5	603.9	622.2	643.7	669.1	672.6	693.6
10°	512.3	517.7	522.3	537.1	556.2	582.1	611.8	642.9	677.0	682.2	712.0
12.5°	486.1	491.3	496.4	509.2	533.0	564.7	605.0	646.8	690.1	697.5	736.8
15°	476.8	481.4	485.5	497.0	519.1	555.0	603.6	654.7	706.7	716.6	766.8
17.5°	478.2	480.6	483.4	492.1	513.6	550.7	606.1	668.3	726.4	735.1	796.7
20°	486.1	487.5	487.7	493.7	512.8	550.2	611.0	681.4	745.0	756.7	826.5
22.5°	496.2	496.7	496.2	500.3	518.0	554.2	617.6	697.2	765.7	776.5	856.5
25°	543.4	533.0	519.9	512.0	526.7	562.2	627.4	718.5	788.3	799.0	885.7
27.5°	689.8	660.1	613.2	560.6	544.7	573.6	641.0	740.0	811.2	820.7	917.1
30°	927.7	888.7	809.0	690.3	602.6	597.7	658.8	761.6	835.5	845.8	950.6
32.5°	1166.0	1156.5	1064.7	900.5	732.7	651.1	688.2	790.8	867.7	875.9	995.9
35°	1407.2	1387.8	1312.6	1150.3	933.2	759.9	737.3	828.9	910.0	919.2	1061.9
37.5°	1591.9	1580.1	1533.5	1399.8	1171.0	927.9	821.3	888.2	971.3	981.7	1146.5
40°	1755.0	1749.6	1733.7	1645.6	1436.9	1147.8	951.9	979.8	1056.5	1068.7	1250.1
42.5°	1883.2	1896.0	1905.1	1880.5	1711.0	1398.7	1127.6	1108.5	1175.1	1187.7	1382.1
45°	2014.4	2018.7	2055.0	2090.5	1983.3	1661.1	1325.6	1259.4	1322.7	1338.2	1540.4
47.5°	2098.7	2116.1	2180.0	2242.4	2212.2	1921.4	1538.4	1437.5	1493.7	1522.8	1717.6
50°	2104.9	2137.9	2225.8	2334.6	2378.8	2169.1	1769.8	1640.4	1700.2	1732.4	1906.9
52.5°	2000.5	2051.7	2187.9	2347.1	2468.8	2378.8	2008.9	1843.4	1920.0	1962.1	2103.3
55°	1533.8	1600.8	2045.2	2279.0	2472.4	2537.8	2241.9	2054.8	2165.0	2212.5	2315.6
57.5°	1336.3	1370.1	1608.0	2160.6	2406.6	2602.0	2452.5	2256.1	2431.5	2490.3	2516.1
60°	1111.8	1156.3	1348.6	1967.0	2317.4	2608.2	2638.5	2515.8	2720.4	2786.6	2699.8
62.5°	755.5	803.8	995.1	1634.2	2195.5	2605.2	2791.0	2783.1	3041.4	3112.6	2855.6
65°	468.1	498.4	624.3	1334.3	2025.0	2608.5	2950.6	3107.7	3380.1	3452.4	2976.2
67.5°	369.9	383.8	449.6	1024.5	1731.2	2534.8	3109.8	3412.9	3699.0	3756.3	3013.0
70°	248.5	257.0	327.1	686.9	1288.0	2194.9	3106.9	3566.2	3863.2	3891.9	2878.8
72.5°	130.9	137.5	191.2	318.1	778.0	1560.3	2618.9	3382.9	3699.8	3656.8	2460.6
75°	65.5	76.4	128.7	161.4	332.2	870.1	1626.3	2667.2	2912.1	2745.2	1578.8
77.5°	49.6	60.0	106.4	106.4	115.6	292.9	688.7	1454.7	1341.7	1117.2	463.4
80°	31.7	40.9	93.0	80.5	48.3	74.4	179.5	407.5	285.1	216.9	84.3
82.5°	18.6	26.8	77.5	53.2	27.0	27.6	50.7	86.7	73.9	57.6	25.9
85°	7.4	17.4	53.2	21.0	10.7	6.9	15.3	18.6	15.3	11.5	6.6
87.5°	0.0	4.1	9.2	0.0	0.8	0.5	1.1	1.3	1.3	1.1	2.2
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°	673.7	673.7	673.7	673.7	673.7	673.7	673.7	673.7	673.7	673.7	673.7
2.5°	676.7	677.3	679.0	679.2	675.4	670.5	668.6	667.8	664.5	664.2	664.7
5°	684.9	687.4	684.9	677.8	660.9	637.1	619.2	604.4	591.1	587.0	584.6
7.5°	701.3	703.8	696.4	668.6	626.0	578.8	536.3	506.2	479.3	469.1	465.0
10°	724.8	728.1	704.8	648.6	573.4	497.5	425.5	374.7	335.3	319.2	312.3
12.5°	754.2	755.5	709.5	618.4	504.9	396.6	294.6	240.3	205.1	192.0	188.0
15°	786.7	784.7	710.0	577.2	411.6	280.4	192.3	158.0	143.7	139.4	139.4
17.5°	820.7	812.8	699.2	517.7	309.3	191.8	142.7	134.5	132.0	130.9	130.7
20°	854.3	836.6	679.2	439.9	222.0	143.2	129.6	127.1	125.8	125.2	124.6
22.5°	884.9	854.5	645.1	349.7	161.2	126.6	122.5	120.3	117.9	116.7	116.4
25°	914.6	865.0	597.1	265.4	129.0	118.4	115.1	111.0	107.7	106.4	105.9
27.5°	943.5	871.5	537.1	196.4	115.1	110.7	104.8	99.0	96.6	96.0	95.4
30°	974.4	873.7	468.9	146.5	106.7	101.2	92.5	85.9	84.6	84.9	84.9
32.5°	1012.0	877.0	400.2	120.0	99.5	89.8	79.3	72.6	71.4	72.6	72.3
35°	1057.0	883.6	333.8	110.5	93.3	78.0	66.8	61.1	60.0	60.8	60.6
37.5°	1118.1	894.1	271.9	108.5	88.1	68.2	56.2	51.6	51.6	51.9	51.6
40°	1199.4	922.5	216.6	107.2	85.4	60.8	47.5	45.5	46.3	46.9	46.9
42.5°	1298.4	982.8	179.2	105.6	82.4	57.6	43.0	42.2	43.7	44.2	44.2
45°	1409.4	1059.1	166.2	102.8	79.6	59.8	41.2	40.1	41.7	42.0	42.2
47.5°	1524.3	1133.9	164.5	99.8	76.9	63.0	40.7	38.2	40.1	40.4	40.7
50°	1640.4	1182.7	166.2	95.2	72.6	63.0	40.9	36.3	37.9	38.7	39.1
52.5°	1757.5	1205.1	165.0	85.1	64.9	59.1	40.9	34.6	36.3	36.8	36.8
55°	1870.9	1200.7	148.4	70.1	55.1	52.4	39.9	33.3	34.3	34.6	34.6
57.5°	1960.6	1139.9	117.6	54.5	44.7	43.7	36.3	31.7	32.5	32.2	32.2
60°	2007.6	1006.2	84.0	42.0	35.2	34.3	31.9	29.4	30.0	28.6	28.4
62.5°	2008.2	829.5	56.2	33.3	28.1	27.3	27.3	26.4	25.9	23.2	22.3
65°	1965.3	633.3	37.4	26.4	22.7	21.3	23.0	22.7	20.7	16.9	16.4
67.5°	1868.2	415.1	28.4	20.7	17.4	16.6	18.2	19.1	17.7	14.1	13.9
70°	1668.5	241.7	23.5	16.1	13.1	12.3	14.8	16.4	14.8	11.5	10.9
72.5°	1385.9	130.4	19.1	12.0	9.0	8.2	11.7	13.3	11.7	8.4	8.2
75°	899.3	69.8	14.8	7.9	4.6	5.2	8.7	9.8	8.2	5.4	4.9
77.5°	302.0	30.9	9.2	3.8	2.2	2.2	5.2	6.0	3.8	1.9	1.6
80°	67.3	12.8	3.8	1.6	0.8	0.8	1.1	1.1	0.5	0.0	0.0
82.5°	22.1	5.2	1.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.4	1.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.3	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)