

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: P959955

Luminaire Tested: **NAV-SB1B-827-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959955
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-827-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 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: 4179.9 lumens
Efficiency: N/A
Efficacy: 105.0 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

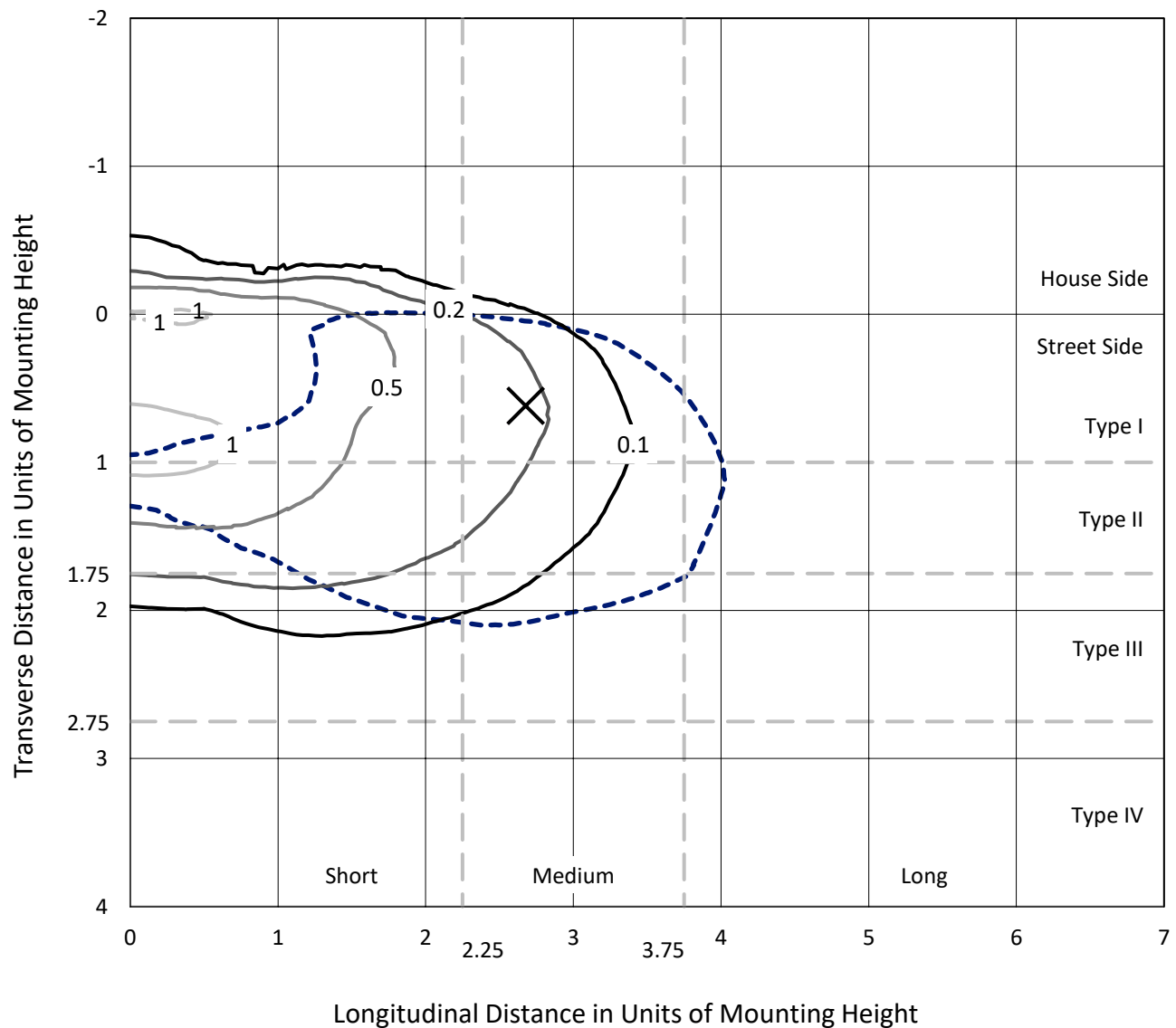


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Iso-Footcandle Lines of Horizontal Illumination

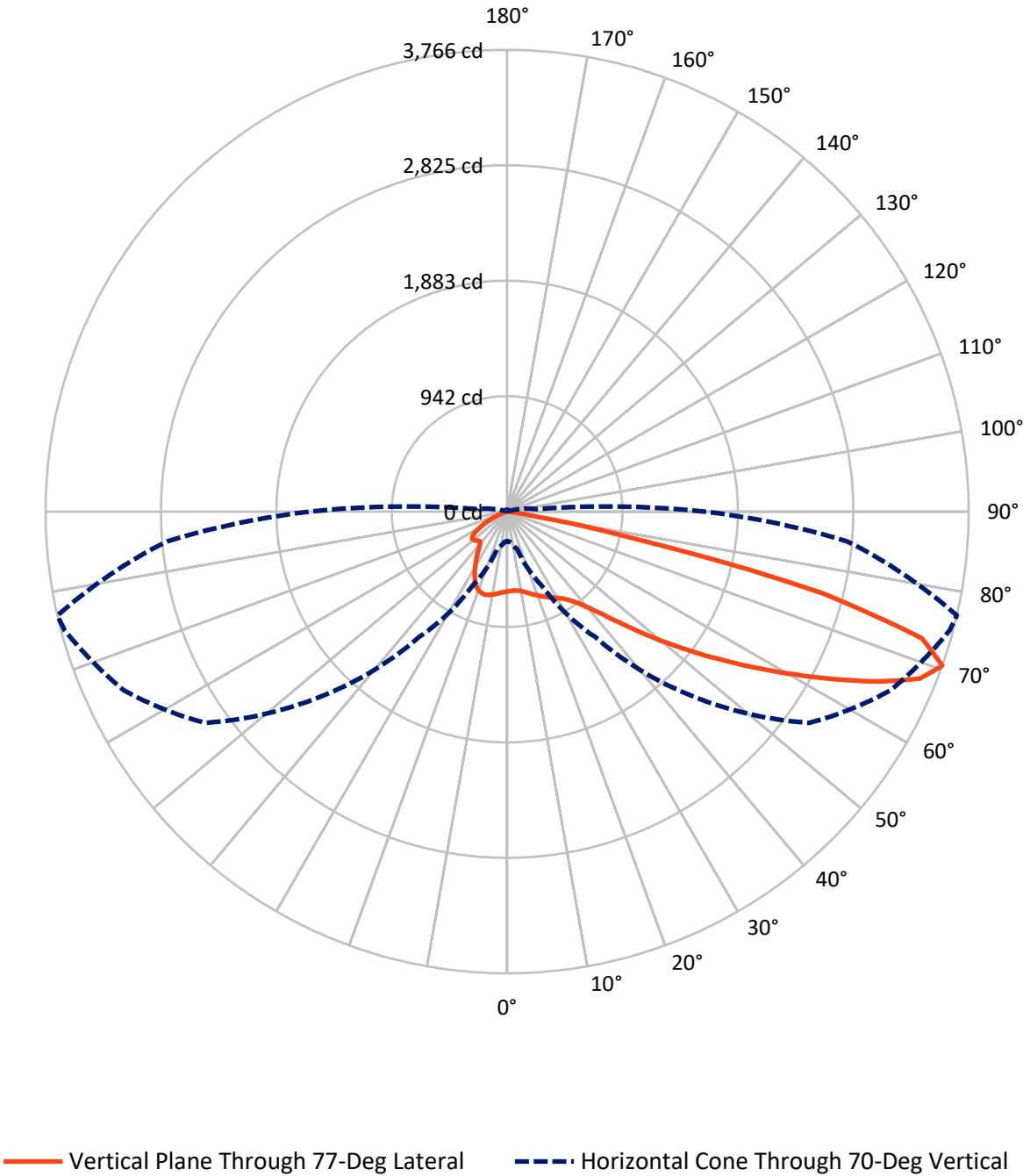
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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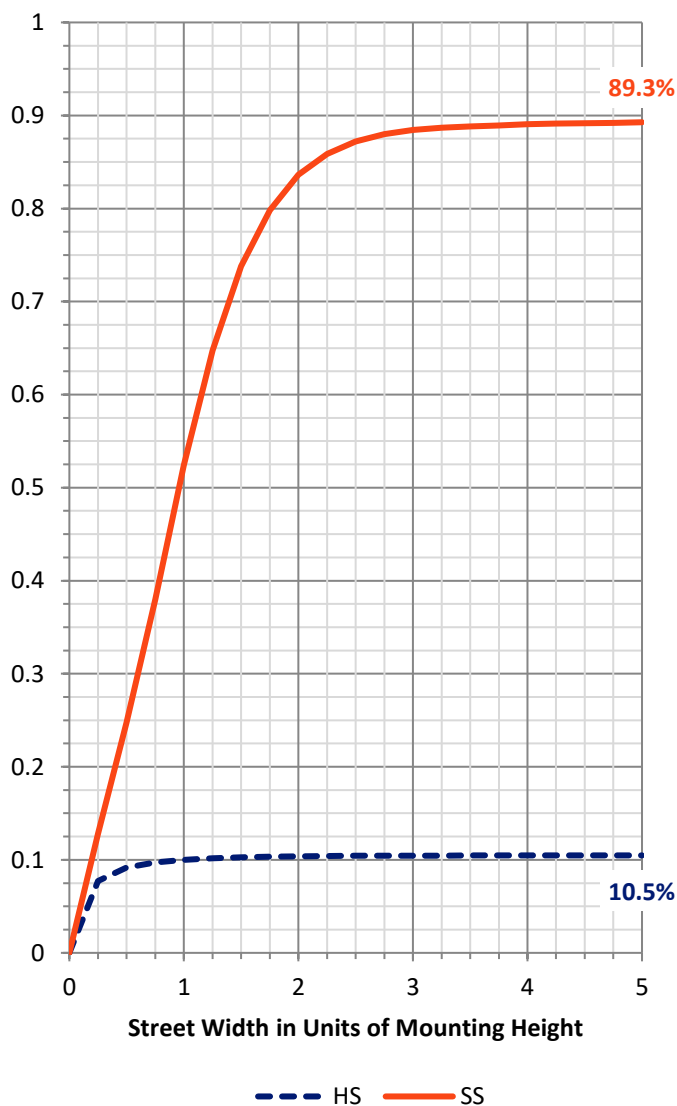
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	440.6	0.0	440.6
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	3739.3	0.0	3739.3
	% Fixture	89.5	0.0	89.5
Total	Lumens	4179.9	0.0	4179.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.2	1.3
10°-20°	133.4	3.2
20°-30°	206.3	4.9
30°-40°	374.4	9.0
40°-50°	706.7	16.9
50°-60°	1021.1	24.4
60°-70°	1086.9	26.0
70°-80°	576.0	13.8
80°-90°	18.9	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°	4179.9	100.0
0°-180°	4179.9	100.0

Coefficient of Utilization



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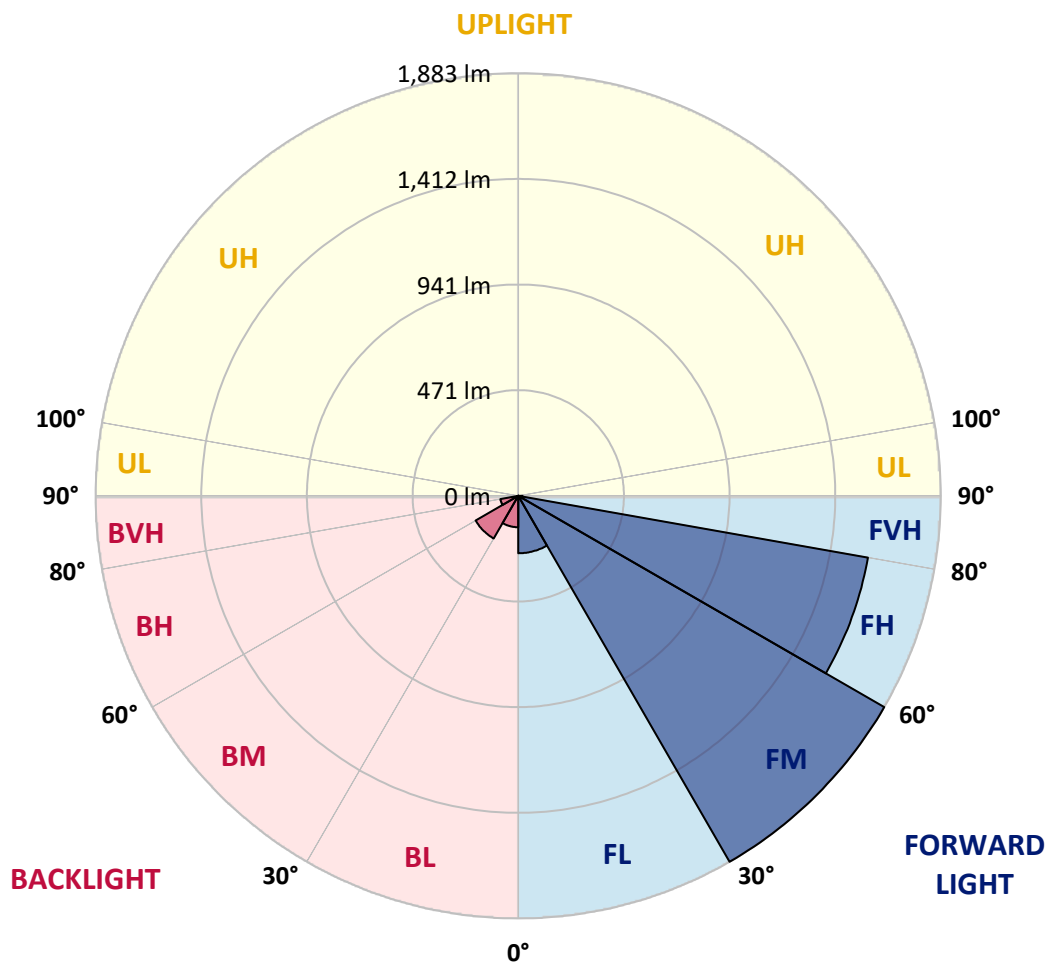
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	255.9	6.1			
FM	(30°-60°)	1882.8	45.0			
FH	(60°-80°)	1582.2	37.9			G1/1800
FVH	(80°-90°)	18.4	0.4			G1/100
BL	(0°-30°)	140.0	3.3	B1/500		
BM	(30°-60°)	219.3	5.2	B0/220		
BH	(60°-80°)	80.8	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°	652.0	652.0	652.0	652.0	652.0	652.0	652.0	652.0	652.0	652.0	652.0
2.5°	612.1	617.7	616.8	620.5	621.9	627.2	632.4	639.6	647.5	647.3	652.5
5°	577.6	583.1	584.5	589.5	595.7	603.9	614.8	629.0	643.8	646.2	656.7
7.5°	536.7	542.4	545.9	556.0	567.5	584.5	602.1	623.0	647.5	651.0	671.3
10°	495.7	501.0	505.5	519.8	538.2	563.3	592.0	622.2	655.2	660.2	688.9
12.5°	470.4	475.4	480.4	492.8	515.8	546.4	585.5	625.9	667.8	675.0	713.0
15°	461.5	465.9	469.9	480.9	502.4	537.2	584.1	633.6	684.0	693.4	742.0
17.5°	462.7	465.1	467.7	476.2	497.0	532.9	586.5	646.7	702.9	711.3	771.0
20°	470.4	471.7	472.0	477.8	496.3	532.4	591.3	659.4	720.9	732.3	799.8
22.5°	480.1	480.7	480.1	484.1	501.2	536.4	597.6	674.7	741.0	751.5	828.8
25°	525.8	515.8	503.1	495.5	509.7	544.1	607.1	695.3	762.9	773.2	857.1
27.5°	667.6	638.8	593.4	542.4	527.2	555.1	620.3	716.2	785.0	794.3	887.4
30°	897.8	860.0	782.9	668.1	583.1	578.3	637.4	737.0	808.5	818.6	919.9
32.5°	1128.4	1119.2	1030.2	871.4	709.0	630.1	665.9	765.3	839.7	847.6	963.7
35°	1361.8	1343.1	1270.2	1113.1	903.0	735.4	713.5	802.2	880.6	889.6	1027.7
37.5°	1540.5	1529.2	1484.0	1354.6	1133.2	898.0	794.8	859.5	940.0	950.0	1109.5
40°	1698.3	1693.1	1677.7	1592.5	1390.6	1110.8	921.3	948.1	1022.3	1034.2	1209.8
42.5°	1822.4	1834.9	1843.6	1819.8	1655.9	1353.6	1091.2	1072.8	1137.1	1149.3	1337.5
45°	1949.3	1953.6	1988.7	2023.0	1919.3	1607.5	1282.9	1218.7	1280.0	1295.0	1490.7
47.5°	2030.9	2047.8	2109.7	2170.0	2140.8	1859.4	1488.8	1391.1	1445.5	1473.7	1662.2
50°	2037.0	2069.0	2153.9	2259.3	2302.0	2099.1	1712.6	1587.5	1645.3	1676.5	1845.4
52.5°	1935.9	1985.5	2117.2	2271.4	2389.2	2302.0	1944.1	1783.9	1858.0	1898.7	2035.4
55°	1484.3	1549.2	1979.2	2205.4	2392.6	2455.9	2169.5	1988.5	2095.1	2141.0	2240.9
57.5°	1293.1	1325.9	1556.1	2090.9	2329.0	2518.0	2373.3	2183.2	2353.0	2410.0	2434.8
60°	1075.9	1119.0	1305.0	1903.4	2242.7	2524.1	2553.4	2434.6	2632.5	2696.7	2612.7
62.5°	731.2	777.9	963.0	1581.5	2124.6	2521.2	2700.9	2693.3	2943.2	3012.2	2763.5
65°	452.9	482.3	604.2	1291.3	1959.7	2524.3	2855.3	3007.4	3271.1	3341.0	2880.1
67.5°	357.9	371.4	435.0	991.5	1675.4	2453.0	3009.5	3302.8	3579.6	3635.1	2915.8
70°	240.5	248.7	316.5	664.7	1246.4	2124.1	3006.5	3451.1	3738.6	3766.3	2786.0
72.5°	126.7	133.0	185.0	307.8	752.9	1509.9	2534.3	3273.7	3580.4	3538.7	2381.3
75°	63.3	73.9	124.6	156.3	321.5	842.0	1573.8	2581.1	2818.1	2656.6	1527.9
77.5°	48.1	58.1	102.9	102.9	111.9	283.5	666.6	1407.7	1298.5	1081.2	448.4
80°	30.6	39.6	90.0	77.9	46.7	72.1	173.7	394.3	275.8	209.8	81.6
82.5°	17.9	25.8	74.9	51.5	26.1	26.6	49.1	83.9	71.5	55.7	25.1
85°	7.2	16.9	51.5	20.3	10.2	6.6	14.8	17.9	14.8	11.1	6.4
87.5°	0.0	4.0	9.0	0.0	0.8	0.5	1.0	1.3	1.3	1.0	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°	652.0	652.0	652.0	652.0	652.0	652.0	652.0	652.0	652.0	652.0	652.0
2.5°	654.9	655.4	657.0	657.2	653.5	648.8	647.0	646.2	643.0	642.8	643.3
5°	662.9	665.2	662.9	656.0	639.6	616.6	599.2	585.0	572.1	568.1	565.7
7.5°	678.7	681.0	673.9	647.0	605.8	560.2	519.0	489.9	463.8	454.0	450.1
10°	701.4	704.5	682.1	627.7	554.8	481.4	411.7	362.6	324.4	308.8	302.3
12.5°	729.9	731.2	686.5	598.4	488.6	383.8	285.1	232.6	198.5	185.8	181.8
15°	761.3	759.4	687.1	558.5	398.3	271.3	186.1	152.8	139.1	134.9	134.9
17.5°	794.3	786.6	676.5	501.0	299.3	185.5	138.1	130.2	127.7	126.7	126.5
20°	826.8	809.5	657.2	425.8	214.8	138.6	125.4	123.0	121.7	121.2	120.6
22.5°	856.3	827.0	624.3	338.5	156.0	122.5	118.5	116.4	114.1	113.0	112.7
25°	885.1	837.0	577.8	256.9	124.8	114.6	111.4	107.4	104.2	102.9	102.4
27.5°	913.1	843.4	519.8	190.0	111.4	107.2	101.4	95.8	93.5	92.9	92.4
30°	942.9	845.5	453.8	141.8	103.2	97.9	89.5	83.1	81.8	82.1	82.1
32.5°	979.3	848.7	387.2	116.1	96.4	86.8	76.8	70.2	69.2	70.2	69.9
35°	1022.8	855.0	323.1	106.9	90.3	75.5	64.7	59.1	58.1	58.8	58.6
37.5°	1082.0	865.3	263.2	105.1	85.3	66.0	54.4	49.9	49.9	50.1	49.9
40°	1160.7	892.8	209.6	103.7	82.6	58.8	45.9	44.1	44.9	45.4	45.4
42.5°	1256.4	951.1	173.4	102.2	79.7	55.7	41.7	40.9	42.2	42.7	42.7
45°	1363.9	1025.0	160.7	99.5	77.1	57.8	39.9	38.8	40.4	40.7	40.9
47.5°	1475.1	1097.3	159.2	96.7	74.4	61.0	39.4	37.0	38.8	39.1	39.4
50°	1587.5	1144.5	160.7	92.1	70.2	61.0	39.6	35.2	36.7	37.5	37.7
52.5°	1700.8	1166.2	159.7	82.3	62.8	57.3	39.6	33.5	35.2	35.7	35.7
55°	1810.6	1161.9	143.6	67.9	53.3	50.6	38.5	32.2	33.2	33.5	33.5
57.5°	1897.4	1103.1	113.8	52.8	43.3	42.2	35.2	30.6	31.4	31.2	31.2
60°	1942.8	973.7	81.3	40.7	34.0	33.2	30.9	28.5	29.0	27.7	27.5
62.5°	1943.3	802.7	54.4	32.2	27.2	26.4	26.4	25.6	25.1	22.4	21.6
65°	1901.9	612.9	36.2	25.6	21.9	20.6	22.1	21.9	20.1	16.4	15.9
67.5°	1807.9	401.8	27.5	20.1	16.9	16.1	17.7	18.4	17.1	13.7	13.4
70°	1614.7	233.9	22.7	15.6	12.7	11.9	14.2	15.9	14.2	11.1	10.6
72.5°	1341.2	126.2	18.4	11.6	8.7	7.9	11.4	12.9	11.4	8.2	7.9
75°	870.3	67.5	14.2	7.7	4.5	5.0	8.4	9.5	7.9	5.3	4.7
77.5°	292.2	29.8	9.0	3.7	2.2	2.2	5.0	5.8	3.7	1.8	1.5
80°	65.2	12.4	3.7	1.5	0.8	0.8	1.0	1.0	0.5	0.0	0.0
82.5°	21.4	5.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.2	1.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.2	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)