

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: P959321

Luminaire Tested: **NAV-SB1A-740-U-SL4-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959321
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-740-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3396.8 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
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

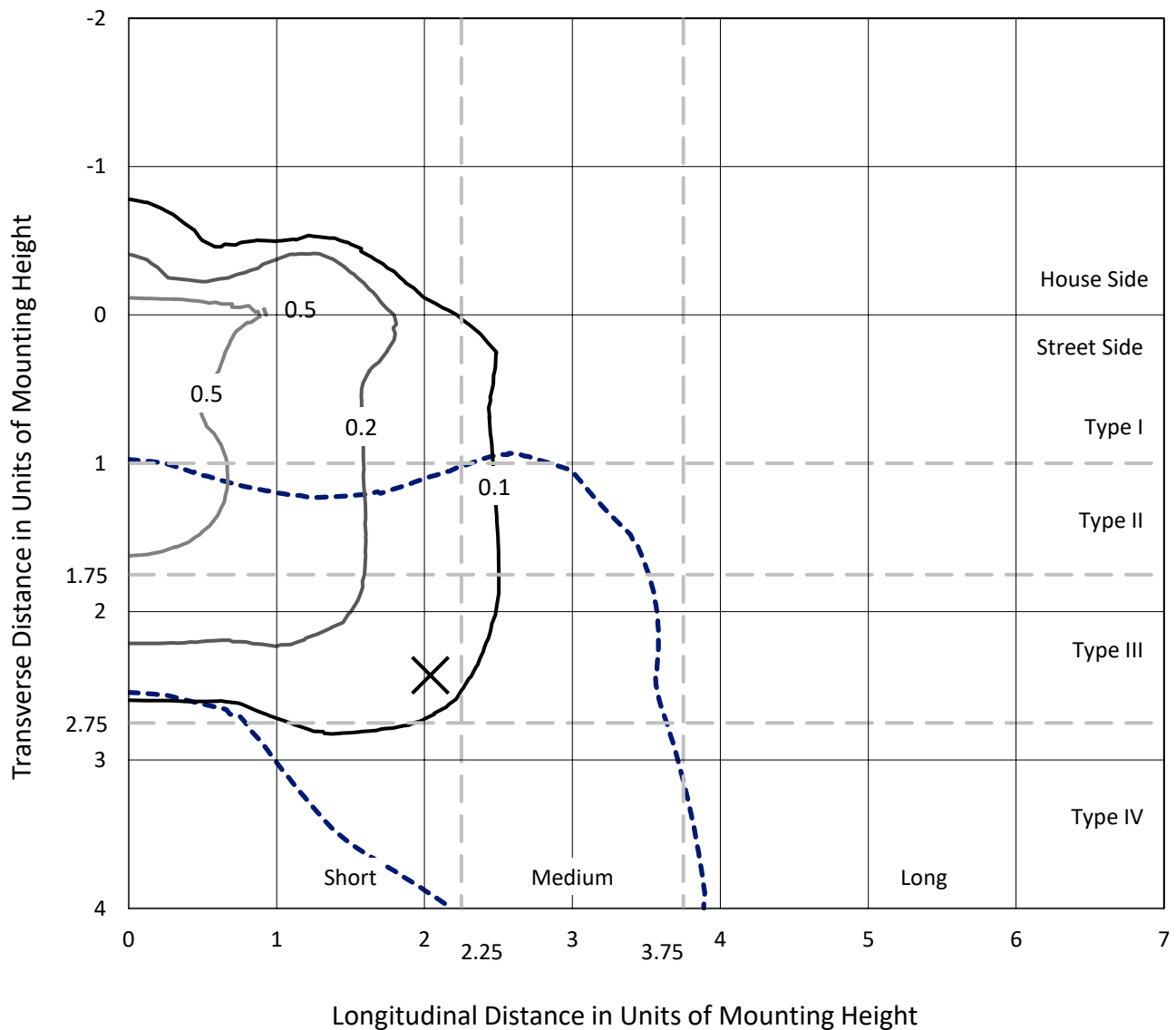


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Iso-Footcandle Lines of Horizontal Illumination

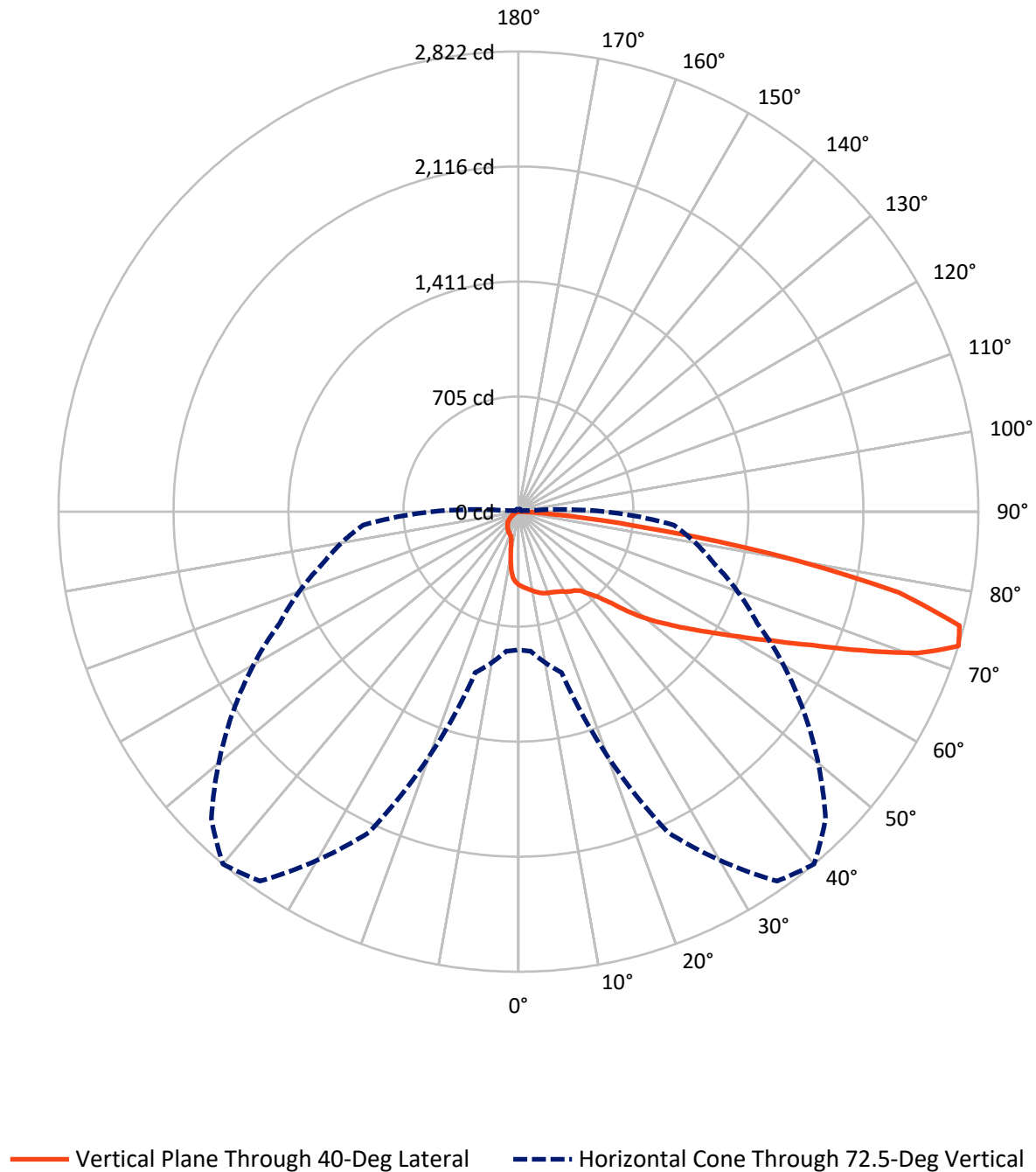
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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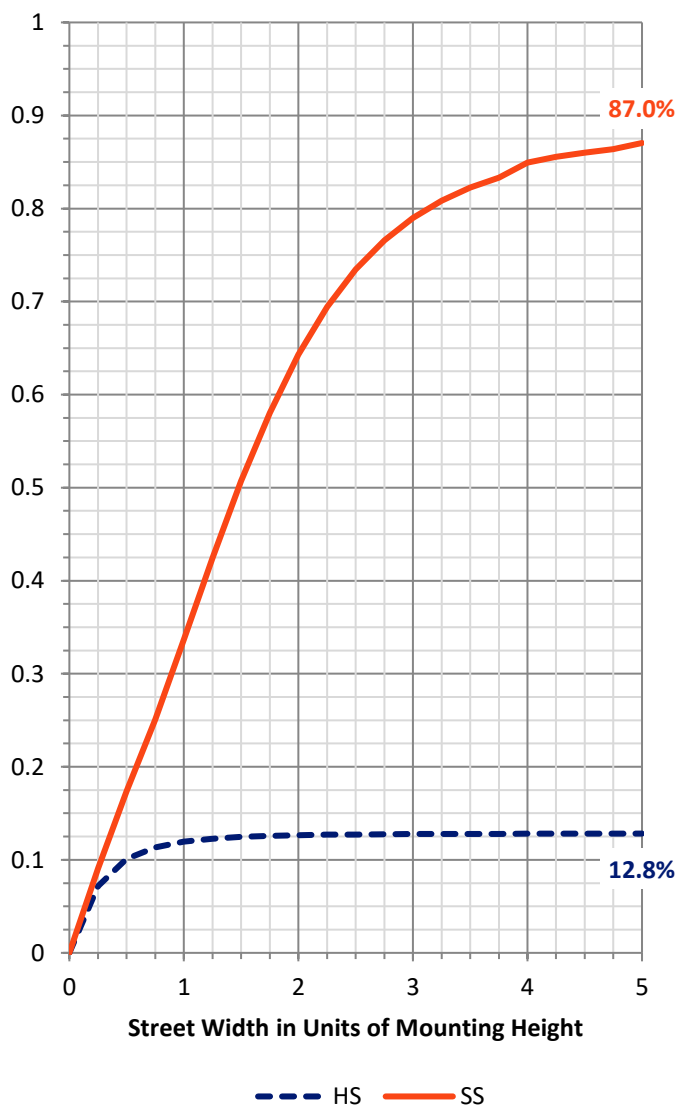
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	438.6	0.0	438.6
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	2958.2	0.0	2958.2
	% Fixture	87.1	0.0	87.1
Total	Lumens	3396.8	0.0	3396.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.1	1.2
10°-20°	111.5	3.3
20°-30°	180.5	5.3
30°-40°	266.5	7.8
40°-50°	448.5	13.2
50°-60°	696.4	20.5
60°-70°	871.4	25.7
70°-80°	713.4	21.0
80°-90°	67.6	2.0
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°	3396.8	100.0
0°-180°	3396.8	100.0

Coefficient of Utilization



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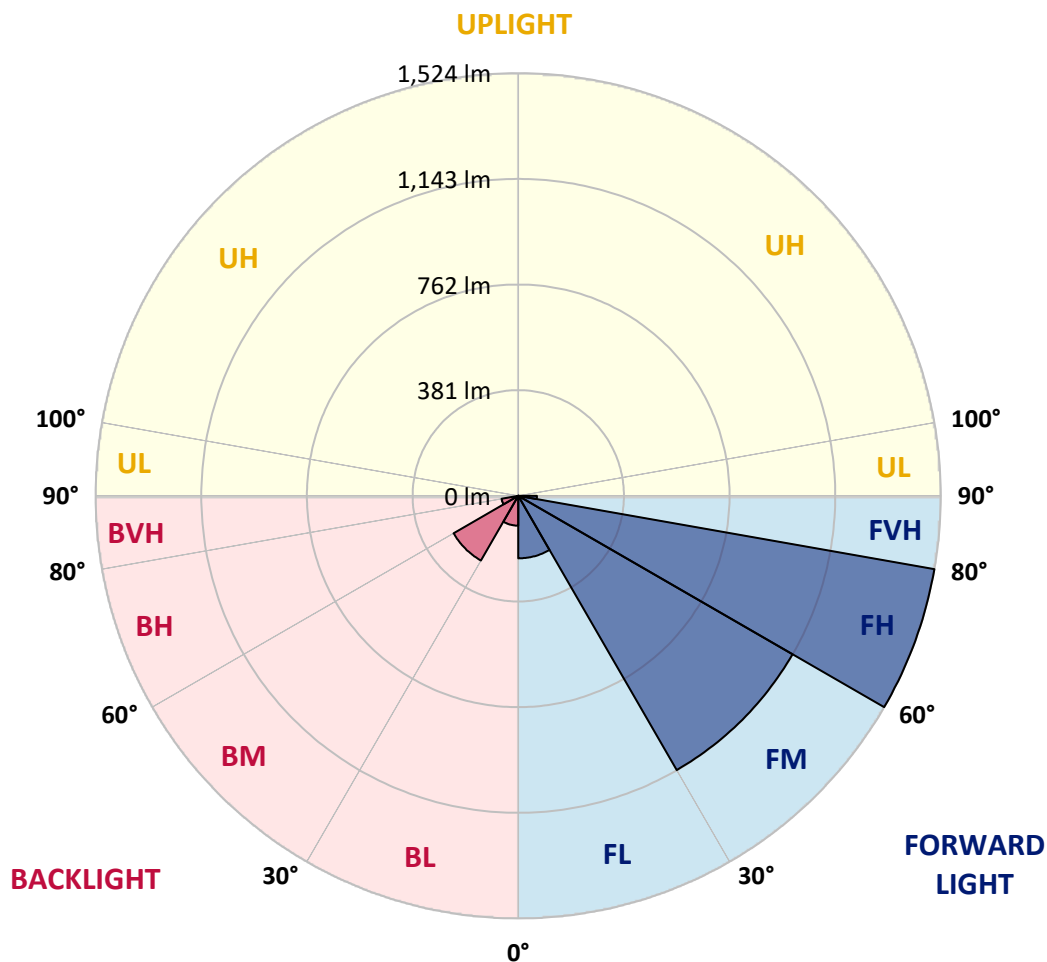
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	225.5	6.6			
FM	(30°-60°)	1142.0	33.6			
FH	(60°-80°)	1523.6	44.9			G1/1800
FVH	(80°-90°)	67.1	2.0			G1/100
BL	(0°-30°)	107.7	3.2	B0/110		
BM	(30°-60°)	269.4	7.9	B1/1000		
BH	(60°-80°)	61.1	1.8	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	449.8	449.8	449.8	449.8	449.8	449.8	449.8	449.8	449.8	449.8	449.8
2.5°	463.3	465.1	464.1	462.1	461.6	460.5	459.2	458.7	456.9	455.4	453.6
5°	476.4	478.2	476.9	474.1	472.8	471.5	469.8	468.2	464.6	461.2	457.2
7.5°	490.7	492.2	490.7	486.6	484.5	483.0	480.5	478.2	474.1	469.2	464.1
10°	506.6	507.9	505.5	500.2	496.8	494.6	492.2	489.6	485.8	480.5	474.4
12.5°	521.4	523.0	519.4	513.0	509.1	506.9	504.3	502.2	498.4	493.2	486.9
15°	534.9	537.3	531.2	524.2	519.9	518.0	515.5	514.2	511.7	508.1	502.2
17.5°	545.2	546.7	540.4	532.2	527.3	526.0	524.2	525.0	524.5	522.6	518.9
20°	553.9	554.9	546.5	536.5	531.2	531.4	530.8	533.4	534.4	534.4	534.2
22.5°	564.7	564.9	554.1	541.6	535.3	537.0	537.8	540.6	542.6	544.7	549.3
25°	578.7	578.2	565.4	548.3	542.6	545.2	546.9	548.0	550.3	553.6	564.2
27.5°	599.7	598.2	581.8	559.0	552.4	554.6	558.0	557.5	556.5	559.0	576.7
30°	626.3	624.2	602.5	574.1	568.0	570.0	571.0	566.4	559.0	561.3	587.6
32.5°	668.5	664.9	634.8	591.0	581.5	583.8	582.5	573.1	562.1	564.4	598.7
35°	741.9	733.3	690.5	626.3	596.9	594.3	591.2	582.0	568.5	566.2	607.9
37.5°	898.0	882.6	809.7	695.2	631.7	615.0	605.6	596.3	575.4	566.2	618.4
40°	1074.0	1058.4	974.3	810.3	689.5	661.3	638.9	613.3	582.5	569.5	634.8
42.5°	1257.7	1240.6	1154.1	953.0	772.1	714.3	672.4	626.8	594.3	579.7	656.5
45°	1462.9	1441.5	1328.3	1101.9	892.2	802.4	726.3	654.7	614.8	597.9	686.1
47.5°	1679.4	1651.5	1502.0	1246.5	1021.3	924.1	825.1	704.6	644.9	625.0	726.3
50°	1871.2	1843.6	1681.4	1397.7	1142.1	1040.0	937.7	773.7	690.2	663.4	780.3
52.5°	2009.1	1988.2	1844.6	1553.7	1267.7	1148.7	1039.8	854.0	747.5	712.5	844.0
55°	2101.5	2082.3	1960.3	1701.6	1413.8	1268.4	1140.3	941.3	816.6	771.4	914.4
57.5°	2157.5	2146.6	2044.0	1833.6	1558.6	1399.4	1255.4	1037.2	898.0	840.7	992.9
60°	2177.5	2168.5	2095.8	1959.5	1733.6	1556.8	1390.7	1145.4	996.7	919.5	1073.5
62.5°	2124.2	2126.1	2133.2	2108.6	1918.1	1741.0	1553.0	1275.4	1106.3	1008.8	1149.2
65°	1873.8	1888.7	2024.8	2274.0	2162.3	1971.8	1759.4	1434.0	1231.6	1110.4	1209.4
67.5°	1551.4	1573.0	1742.3	2370.6	2422.8	2271.4	2047.0	1636.1	1381.1	1213.7	1232.2
70°	1187.7	1210.6	1415.8	2350.4	2666.6	2598.9	2402.6	1893.3	1535.9	1285.4	1174.0
72.5°	847.6	859.4	1021.1	2170.5	2766.7	2821.9	2664.6	2136.8	1614.9	1245.7	957.7
75°	595.6	593.6	700.8	1747.9	2610.9	2794.9	2572.8	2005.0	1461.3	989.6	590.5
77.5°	259.4	259.9	350.0	1061.5	2083.8	2387.0	2138.6	1255.9	1018.7	524.5	249.2
80°	67.2	69.3	128.4	422.6	1254.6	1575.4	1304.3	552.1	470.8	127.9	47.6
82.5°	23.8	25.3	59.1	132.7	462.8	722.5	580.8	176.5	122.8	36.6	12.8
85°	6.9	8.2	31.8	40.7	95.7	204.2	140.9	34.2	30.2	19.0	3.3
87.5°	0.0	1.0	6.4	5.6	5.6	3.8	7.2	3.8	4.8	2.3	1.0
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°	449.8	449.8	449.8	449.8	449.8	449.8	449.8	449.8	449.8	449.8	449.8
2.5°	452.0	450.3	446.5	442.4	438.5	434.9	433.9	430.1	428.2	428.6	428.2
5°	454.4	451.0	443.6	434.7	425.5	415.0	406.3	394.0	383.6	382.2	381.5
7.5°	460.5	455.1	443.1	425.7	402.7	373.8	347.0	320.3	305.2	297.0	296.5
10°	470.0	462.8	444.4	411.1	362.2	310.6	269.9	236.4	219.2	211.4	209.8
12.5°	481.2	473.3	446.5	386.3	310.1	242.3	198.2	177.8	174.2	173.7	173.4
15°	497.1	488.4	448.7	352.8	253.6	184.5	164.2	164.5	167.3	168.8	168.6
17.5°	514.8	506.0	445.5	311.9	197.7	157.6	157.1	159.4	163.5	165.0	164.7
20°	532.7	524.5	433.7	263.7	159.9	150.2	152.2	154.8	158.9	160.9	160.9
22.5°	551.0	544.0	415.0	212.6	144.3	144.8	147.4	150.0	154.6	156.8	156.8
25°	570.8	564.7	390.1	170.4	137.7	139.2	142.5	145.5	150.5	153.2	153.2
27.5°	590.7	586.1	362.0	142.3	131.5	133.2	137.1	141.2	146.1	149.4	149.6
30°	612.4	610.0	339.5	131.7	125.7	127.2	131.5	136.1	141.4	145.5	146.1
32.5°	634.8	634.3	328.5	139.4	120.2	121.3	125.2	129.7	136.3	141.4	142.0
35°	656.7	657.7	322.1	161.1	118.5	115.6	118.2	122.3	130.2	136.6	137.7
37.5°	684.9	687.5	321.8	184.7	122.8	110.0	111.8	114.6	121.6	128.9	130.2
40°	726.8	740.4	338.2	204.9	130.5	104.9	105.4	105.9	109.5	115.6	117.7
42.5°	782.6	822.3	397.3	218.7	133.6	100.2	98.5	95.7	95.2	98.5	100.2
45°	852.0	921.3	501.2	226.4	130.5	95.2	90.3	82.9	80.1	82.4	82.4
47.5°	933.6	1029.7	624.2	228.2	125.4	88.8	80.1	70.3	68.1	68.8	68.6
50°	1013.1	1111.1	732.5	213.4	117.0	80.6	68.8	60.7	59.1	59.3	59.3
52.5°	1083.5	1139.0	763.2	178.4	105.7	70.6	59.1	53.5	52.5	52.5	52.2
55°	1130.1	1108.8	680.5	136.3	91.6	60.4	50.6	47.9	47.4	47.0	46.5
57.5°	1139.8	1010.5	514.0	98.5	71.6	50.9	45.0	43.5	42.4	41.4	40.9
60°	1104.9	846.9	327.2	68.8	53.7	43.5	39.9	38.8	36.8	34.7	34.0
62.5°	1029.7	639.6	181.1	47.9	43.3	37.1	35.3	34.0	30.2	26.9	25.8
65°	928.8	425.2	80.1	37.3	35.3	31.3	30.2	28.4	23.8	20.0	19.2
67.5°	827.2	244.9	36.1	29.9	28.4	25.6	24.8	23.6	20.2	16.6	16.1
70°	711.2	124.1	24.8	23.8	22.0	19.5	20.2	20.0	16.6	13.5	13.0
72.5°	529.6	61.7	18.7	17.9	15.9	13.8	16.6	16.4	13.0	10.2	9.7
75°	299.8	30.4	13.5	12.5	9.4	10.2	13.3	12.5	8.9	6.7	6.1
77.5°	119.0	15.6	8.9	7.7	5.6	6.9	9.7	8.4	4.6	2.8	2.6
80°	27.4	7.7	4.6	3.3	2.6	4.1	5.1	3.1	1.2	0.2	0.0
82.5°	7.7	3.3	1.5	1.2	1.2	1.5	1.2	0.5	0.0	0.0	0.0
85°	2.6	1.5	0.5	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0
87.5°	1.0	0.5	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)