

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: P960478

Luminaire Tested: **NAV-SB1C-827-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960478
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-827-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5103.5 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

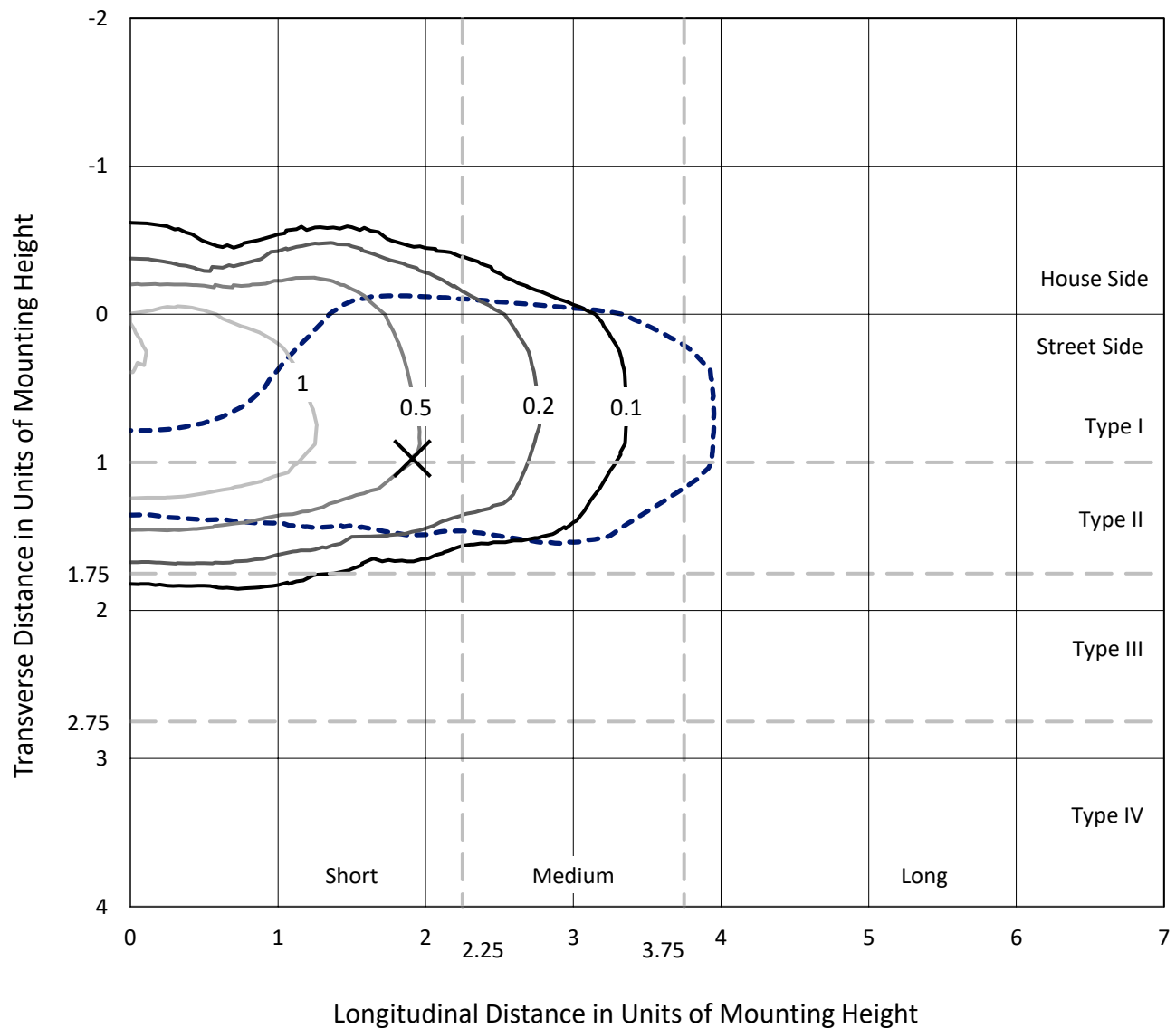
Input Watts (W): 54.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

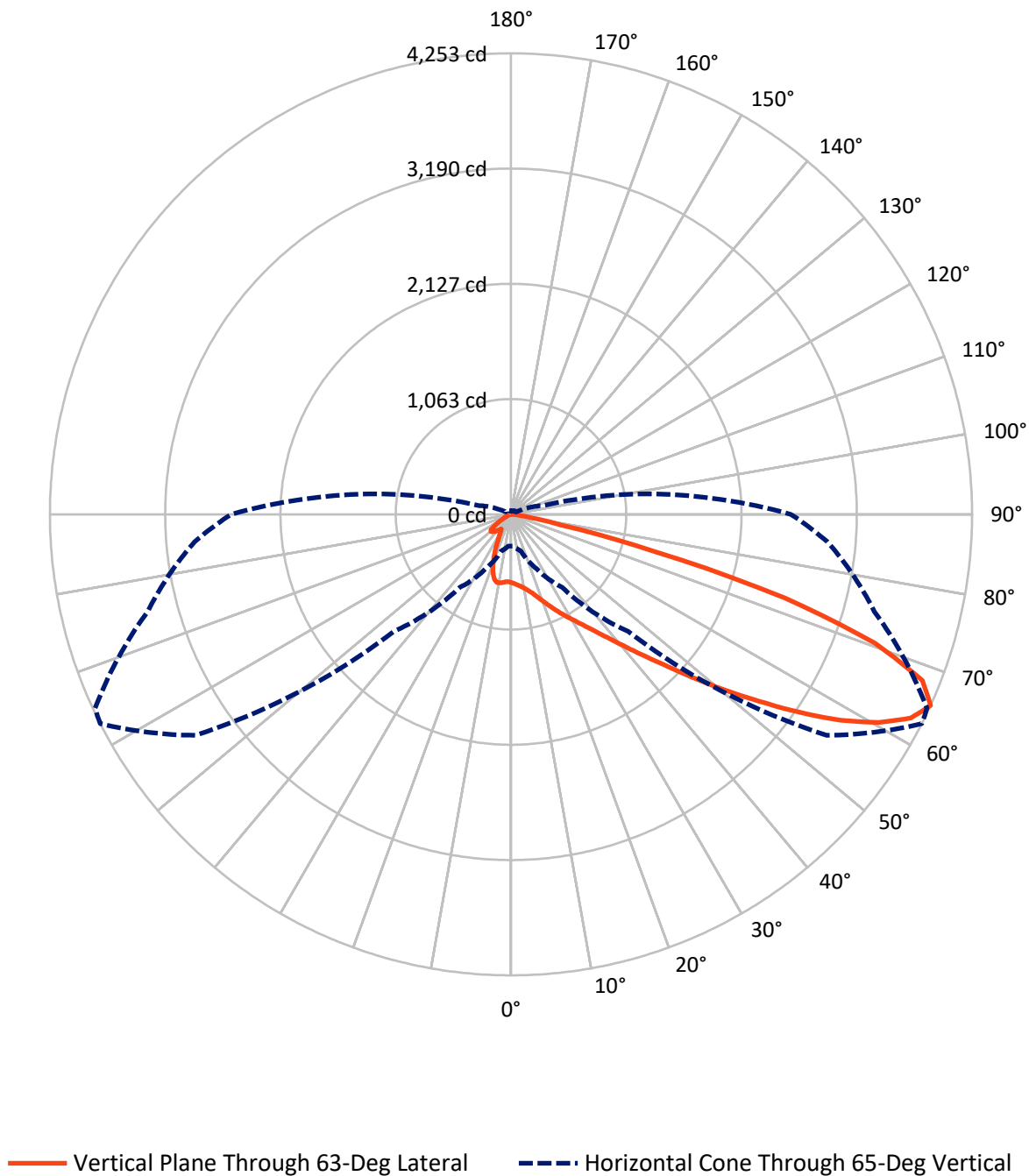
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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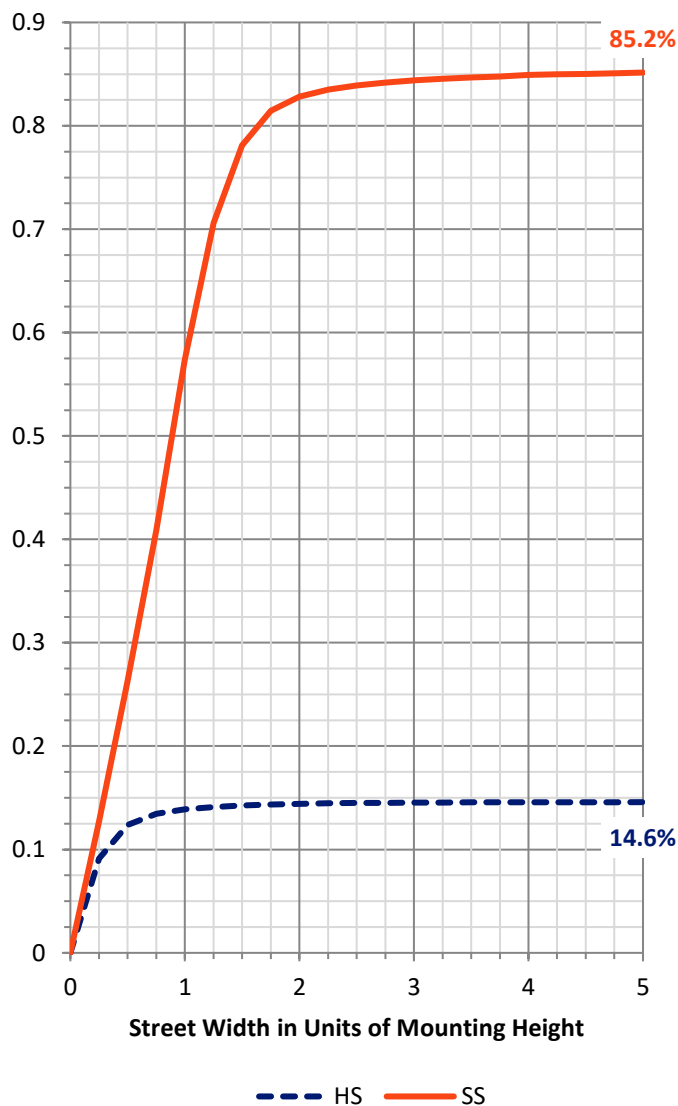
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	750.2	0.0	750.2
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	4353.3	0.0	4353.3
	% Fixture	85.3	0.0	85.3
Total	Lumens	5103.5	0.0	5103.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.3	1.2
10°-20°	164.7	3.2
20°-30°	286.7	5.6
30°-40°	516.8	10.1
40°-50°	1024.9	20.1
50°-60°	1396.1	27.4
60°-70°	1114.4	21.8
70°-80°	504.3	9.9
80°-90°	36.2	0.7
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°	5103.5	100.0
0°-180°	5103.5	100.0

Coefficient of Utilization



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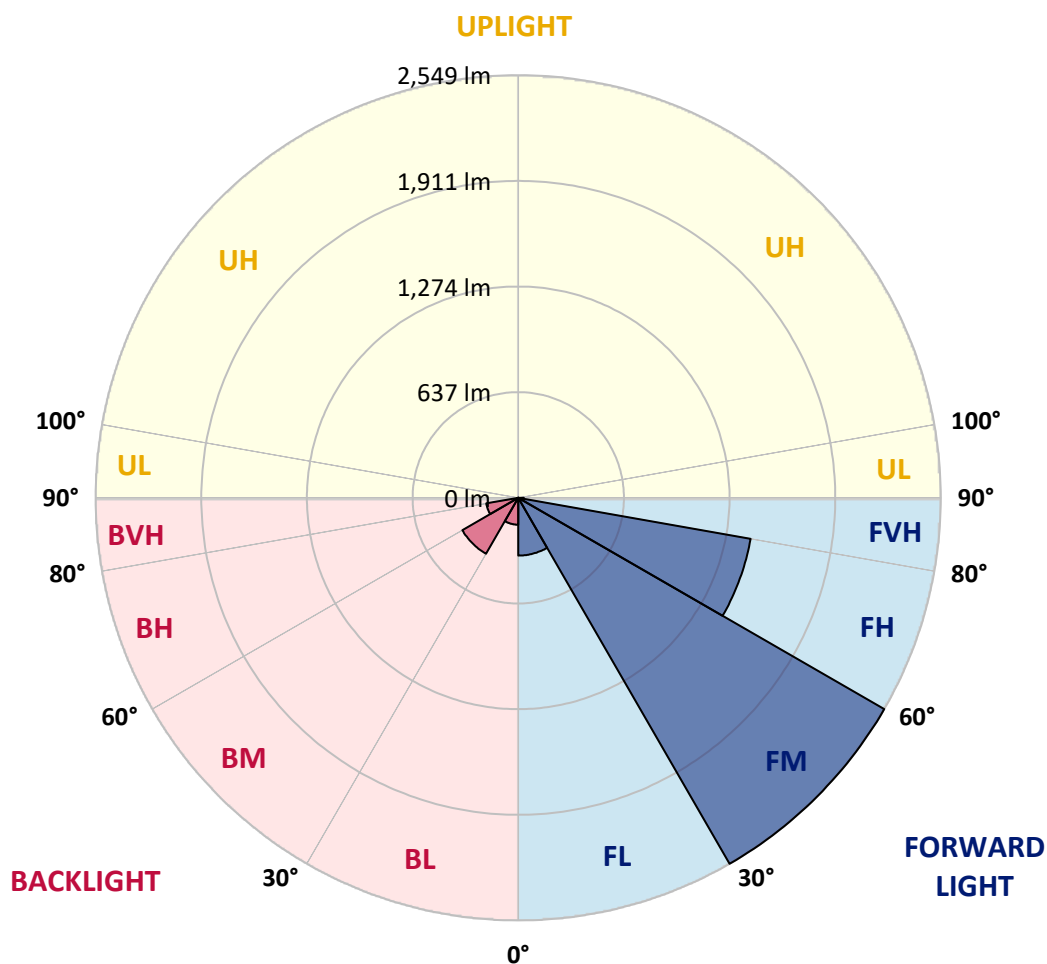
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	348.4	6.8			
FM	(30°-60°)	2548.5	49.9			
FH	(60°-80°)	1422.8	27.9			G1/1800
FVH	(80°-90°)	33.6	0.7			G1/100
BL	(0°-30°)	162.3	3.2	B1/500		
BM	(30°-60°)	389.3	7.6	B1/1000		
BH	(60°-80°)	195.8	3.8	B1/500		G1/500
BVH	(80°-90°)	2.7	0.1			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	629.9	629.9	629.9	629.9	629.9	629.9	629.9	629.9	629.9	629.9	629.9
2.5°	644.6	642.9	645.3	644.2	643.6	642.2	641.4	640.7	639.4	638.3	634.1
5°	646.4	645.3	647.8	649.8	652.0	654.1	655.2	656.5	655.2	652.3	648.1
7.5°	631.6	630.9	636.2	642.5	652.0	660.1	668.8	673.7	674.1	673.0	668.5
10°	630.6	628.8	634.1	641.8	654.1	668.5	684.0	694.4	695.9	700.5	695.6
12.5°	647.1	645.3	652.7	661.1	673.7	688.8	707.8	722.5	724.7	731.0	727.4
15°	674.8	672.3	680.8	691.7	707.8	725.0	745.1	758.4	760.1	767.8	761.6
17.5°	707.1	704.7	714.5	726.1	743.6	767.1	790.3	805.0	807.2	812.1	800.5
20°	748.6	745.4	753.1	763.6	782.3	810.4	838.0	859.2	858.7	858.7	839.8
22.5°	796.6	791.7	798.4	806.8	824.4	858.4	895.3	920.2	920.2	910.4	879.1
25°	848.3	843.4	850.7	858.4	873.9	912.5	955.7	986.6	988.0	971.1	921.3
27.5°	912.9	906.5	912.1	921.3	930.4	969.8	1021.0	1056.8	1057.5	1031.6	961.3
30°	1037.1	1019.3	1001.6	991.9	996.1	1035.0	1089.8	1129.4	1133.0	1097.2	1004.8
32.5°	1264.6	1261.2	1199.4	1118.6	1076.5	1105.3	1166.7	1214.4	1216.6	1170.6	1061.4
35°	1618.2	1614.0	1514.6	1360.9	1223.5	1199.4	1260.0	1316.6	1315.2	1263.2	1134.8
37.5°	2040.3	2036.4	1905.4	1699.7	1477.4	1341.5	1380.5	1439.8	1448.6	1380.5	1229.5
40°	2400.8	2386.4	2303.6	2105.1	1814.5	1577.5	1551.8	1591.2	1600.3	1519.6	1349.9
42.5°	2673.9	2661.6	2619.5	2495.6	2222.4	1926.5	1753.7	1768.8	1779.0	1682.1	1488.3
45°	2815.5	2812.6	2829.5	2817.9	2638.1	2354.8	2042.3	1979.5	1983.4	1862.2	1645.2
47.5°	2835.5	2834.0	2910.9	3019.8	2995.6	2837.9	2412.7	2242.1	2228.5	2065.5	1815.9
50°	2717.5	2714.7	2862.1	3066.1	3234.3	3243.8	2833.3	2538.1	2507.9	2275.8	1993.8
52.5°	2340.8	2340.1	2582.3	2921.9	3318.2	3599.1	3249.0	2863.1	2812.6	2498.4	2182.0
55°	1801.1	1814.1	2091.8	2493.1	3165.1	3770.1	3622.2	3224.1	3146.5	2722.4	2355.4
57.5°	1275.9	1294.9	1569.4	1926.8	2690.4	3669.0	3874.7	3585.8	3502.2	2945.6	2531.4
60°	685.3	702.2	977.1	1403.6	2001.6	3291.9	4007.7	3899.6	3820.6	3157.7	2690.1
62.5°	408.4	413.9	527.7	906.2	1353.8	2514.9	3951.3	4138.7	4073.8	3335.8	2828.1
65°	293.2	294.2	351.5	553.3	821.9	1528.0	3554.8	4253.1	4233.1	3469.8	2930.3
67.5°	246.8	246.1	270.0	367.6	560.0	765.4	2724.4	4091.3	4176.3	3554.8	2988.2
70°	211.7	212.8	240.9	269.3	421.0	433.3	1354.5	3562.2	3743.4	3577.4	2984.7
72.5°	157.6	161.1	187.2	245.4	317.8	298.1	467.7	2641.3	2968.9	3370.5	2829.8
75°	111.3	113.1	131.6	206.4	237.0	217.0	238.7	1365.4	1785.3	2584.0	2316.2
77.5°	85.7	88.9	99.7	144.3	233.5	152.4	146.1	472.5	726.1	1561.0	1588.0
80°	46.3	52.0	72.0	104.2	164.0	107.8	72.4	188.2	246.1	729.9	612.3
82.5°	23.9	26.6	50.2	75.1	93.4	94.1	35.8	78.3	101.5	225.4	83.9
85°	9.4	11.6	33.7	41.4	48.1	46.3	16.2	31.6	36.5	62.5	25.6
87.5°	2.2	3.5	12.3	9.4	9.1	9.8	3.9	7.4	7.1	7.4	4.6
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°	629.9	629.9	629.9	629.9	629.9	629.9	629.9	629.9	629.9	629.9	629.9
2.5°	633.8	632.3	628.4	624.2	619.3	616.5	614.8	614.4	611.9	610.2	611.9
5°	644.2	642.9	635.5	626.7	617.3	609.9	602.8	596.6	587.4	585.6	585.0
7.5°	665.3	661.4	649.5	637.6	619.7	598.3	572.3	542.4	515.8	507.7	503.8
10°	691.3	686.0	671.0	649.8	610.2	552.0	489.0	430.8	384.5	371.5	366.5
12.5°	720.8	716.3	696.2	657.2	570.5	464.8	368.7	296.3	251.4	240.2	237.0
15°	755.9	749.3	721.5	646.1	499.6	353.2	253.2	210.3	194.1	192.1	189.9
17.5°	793.1	782.3	743.9	605.7	404.2	251.0	195.6	183.3	176.3	174.1	173.1
20°	827.2	813.1	757.3	544.6	302.0	195.6	175.2	167.1	160.8	158.4	156.9
22.5°	861.2	841.2	757.3	461.4	226.4	173.4	160.8	153.4	146.1	142.9	141.1
25°	896.7	870.0	743.9	368.7	182.2	159.1	147.1	139.0	132.7	128.8	127.4
27.5°	931.1	894.2	713.4	280.8	162.2	146.4	134.5	126.8	120.7	118.0	118.0
30°	963.8	918.1	670.6	213.1	149.2	134.1	122.9	116.2	110.3	107.4	107.8
32.5°	1008.0	948.3	624.9	174.9	138.0	122.5	112.3	106.0	100.8	98.7	98.7
35°	1069.5	992.9	585.6	171.7	128.5	113.1	102.9	96.9	91.6	89.9	89.9
37.5°	1156.5	1064.9	564.9	192.8	120.7	104.7	95.1	88.9	83.9	82.5	82.2
40°	1263.9	1162.5	576.2	213.8	115.5	97.3	88.1	81.8	77.6	75.8	75.4
42.5°	1391.4	1282.9	638.3	230.0	112.0	90.9	81.5	74.4	71.6	70.9	70.9
45°	1537.8	1415.2	733.4	247.1	106.4	85.0	74.8	69.5	67.4	67.0	66.7
47.5°	1704.3	1560.7	843.7	268.5	100.8	79.3	69.5	66.0	64.3	63.6	63.6
50°	1869.2	1707.0	957.0	280.5	96.2	74.1	65.3	62.5	61.1	60.8	60.8
52.5°	2042.0	1857.6	1048.7	269.3	92.4	69.9	61.8	59.7	58.3	57.9	57.9
55°	2206.6	1979.5	1064.6	228.6	84.7	65.7	57.9	56.9	55.1	55.1	54.7
57.5°	2348.5	2040.6	952.8	167.8	76.9	59.3	54.0	53.0	51.7	51.2	50.9
60°	2478.8	2023.0	735.5	113.1	68.5	53.0	49.2	48.5	47.0	45.3	44.9
62.5°	2552.1	1945.8	503.1	73.7	60.1	46.3	43.6	43.2	40.0	36.5	35.8
65°	2579.8	1787.1	313.9	53.7	50.2	39.7	37.6	36.9	32.3	28.4	28.1
67.5°	2555.6	1525.8	158.4	42.4	39.7	33.0	30.9	30.9	27.8	24.2	23.9
70°	2458.8	1143.9	66.7	34.0	30.5	25.3	25.3	26.6	23.5	19.7	19.3
72.5°	2248.4	769.6	35.5	25.9	22.9	17.9	20.7	21.7	18.7	14.8	14.8
75°	1787.4	469.4	24.6	19.3	14.3	12.6	15.8	16.5	12.6	9.8	9.4
77.5°	1222.5	269.7	16.5	12.3	9.1	7.4	10.9	10.1	6.7	4.6	4.9
80°	536.8	112.3	9.4	5.6	3.5	2.8	3.9	2.8	2.2	1.4	1.4
82.5°	62.8	26.3	3.5	2.2	1.4	0.7	0.3	0.0	0.0	0.0	0.0
85°	13.0	3.2	1.7	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	0.7	0.3	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)