

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: P959774

Luminaire Tested: **NAV-SB1B-727-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959774
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-727-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4125.6 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

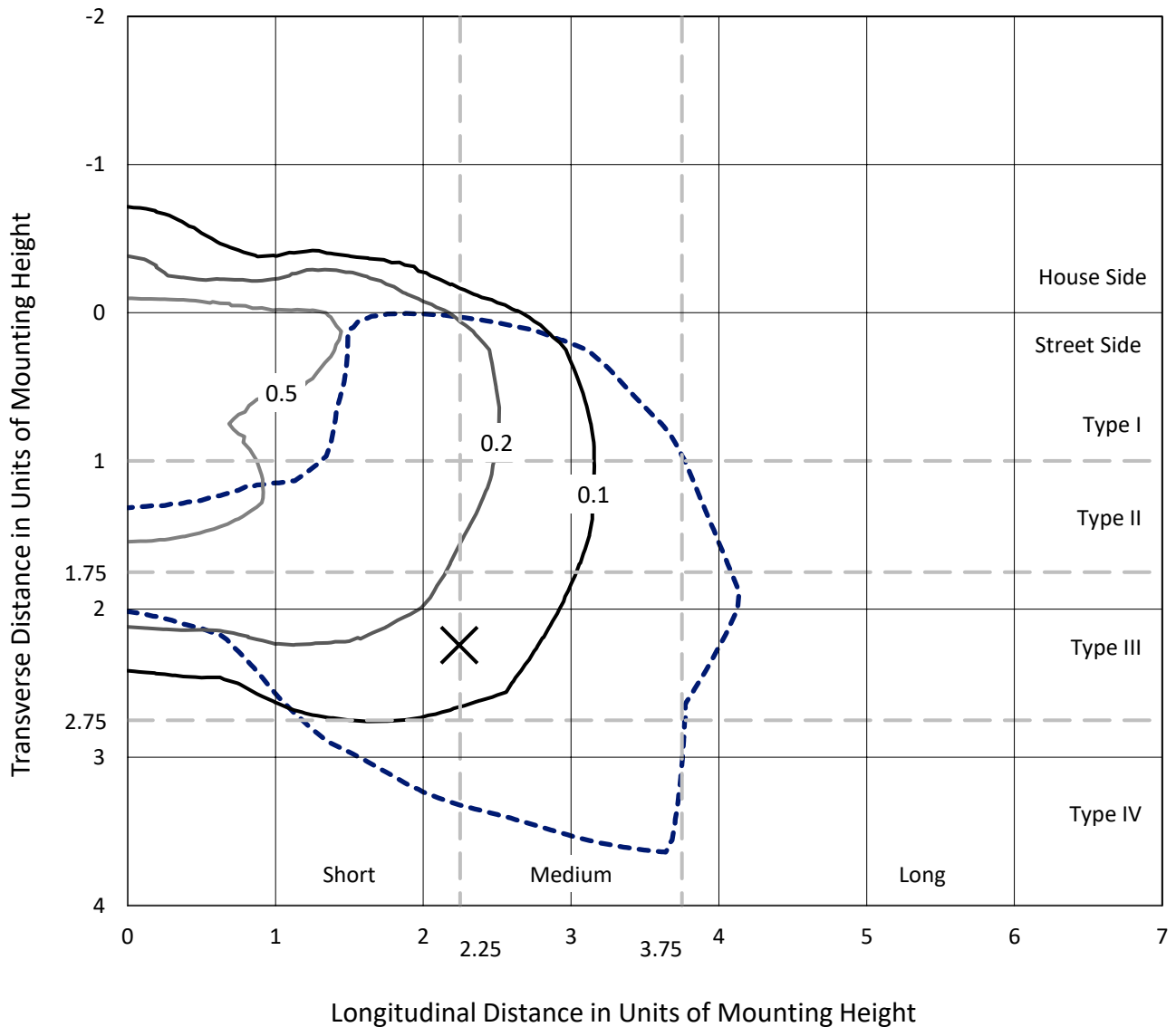
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

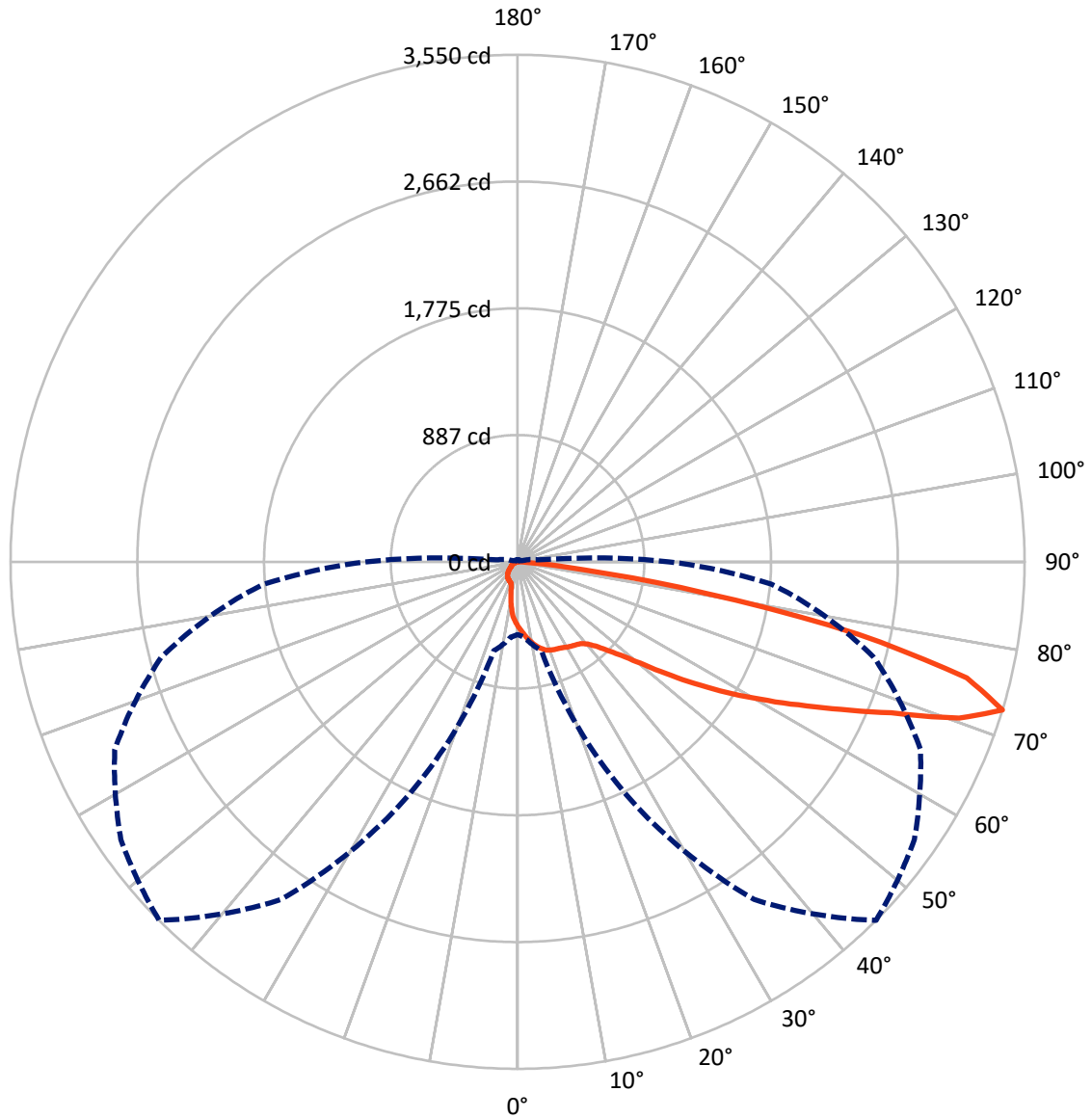
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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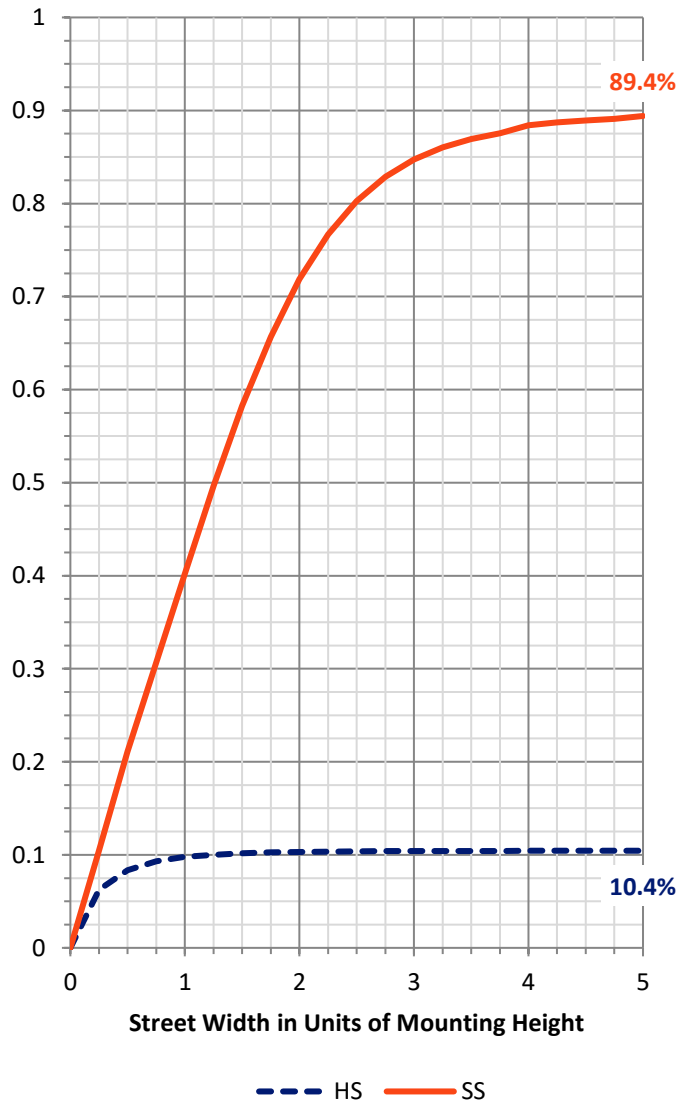
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	433.5	0.0	433.5
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	3692.1	0.0	3692.1
	% Fixture	89.5	0.0	89.5
Total	Lumens	4125.6	0.0	4125.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.6	1.0
10°-20°	124.5	3.0
20°-30°	204.4	5.0
30°-40°	289.9	7.0
40°-50°	479.1	11.6
50°-60°	860.6	20.9
60°-70°	1195.1	29.0
70°-80°	866.9	21.0
80°-90°	62.7	1.5
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°	4125.6	100.0
0°-180°	4125.6	100.0

Coefficient of Utilization

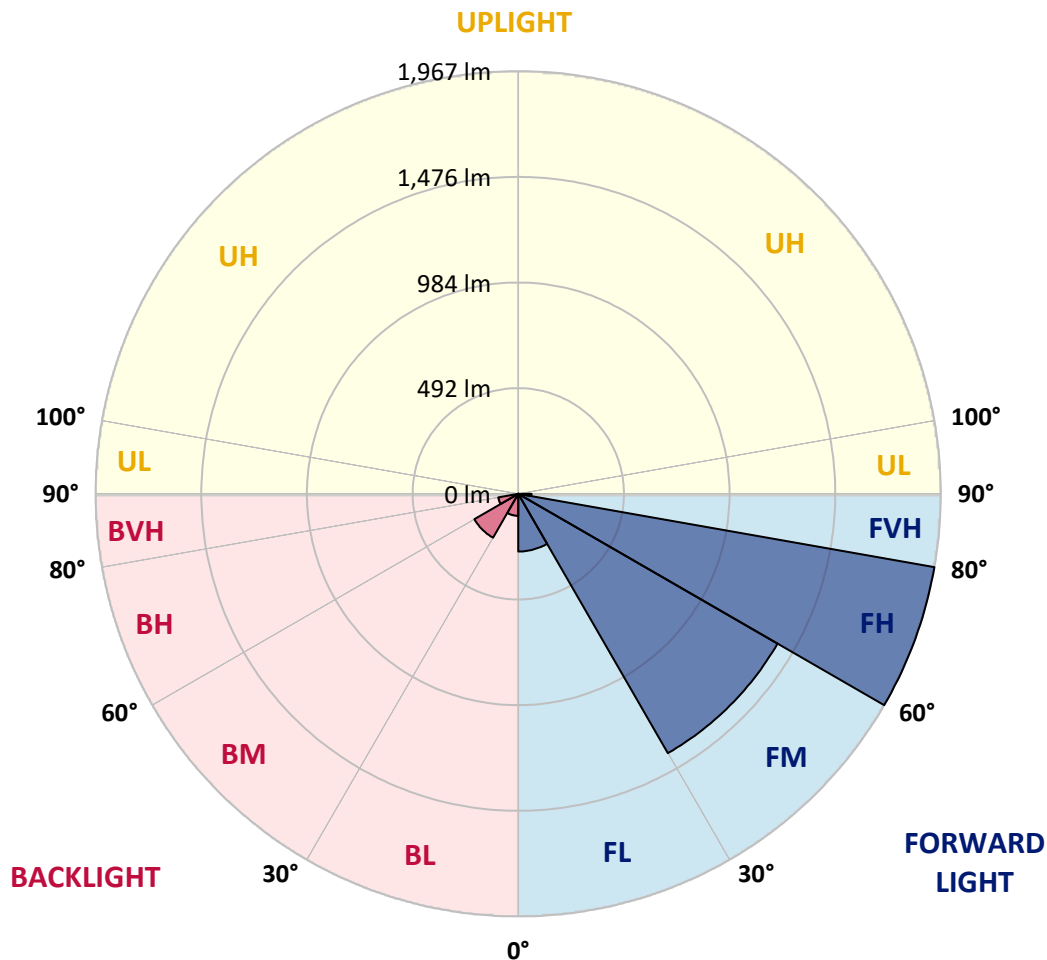


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	268.7	6.5			
FM (30°-60°)	1393.9	33.8			
FH (60°-80°)	1967.4	47.7			G2/5000
FVH (80°-90°)	62.1	1.5			G1/100
BL (0°-30°)	102.7	2.5	B0/110		
BM (30°-60°)	235.8	5.7	B1/1000		
BH (60°-80°)	94.5	2.3	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-G2
 Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	451.9	451.9	451.9	451.9	451.9	451.9	451.9	451.9	451.9	451.9	451.9
2.5°	493.6	494.5	493.9	490.6	484.9	481.9	480.1	474.5	470.9	464.3	457.6
5°	538.9	542.3	540.4	533.6	523.0	515.4	513.1	501.5	491.1	479.0	464.9
7.5°	587.1	588.9	585.2	576.5	562.1	549.1	547.1	531.1	514.4	495.9	476.7
10°	628.8	630.8	625.1	612.4	596.1	580.2	577.3	559.5	539.9	517.0	492.5
12.5°	663.7	665.7	658.4	643.2	625.1	608.5	605.8	587.1	565.5	540.1	509.7
15°	690.2	693.8	684.0	667.7	648.2	631.6	630.3	611.9	590.8	562.6	530.2
17.5°	705.7	709.4	700.1	680.4	663.7	649.6	648.0	632.7	613.1	586.0	550.2
20°	708.3	711.7	701.7	684.6	670.8	659.5	658.7	647.7	633.3	607.4	571.9
22.5°	700.6	704.9	695.9	682.0	672.5	666.6	665.4	659.3	651.1	629.1	592.2
25°	692.7	696.1	689.3	677.2	672.2	671.6	672.5	671.4	669.6	651.1	615.8
27.5°	692.2	695.9	688.2	676.7	673.8	679.8	680.6	686.0	687.4	671.1	638.7
30°	697.0	699.5	692.2	680.1	678.7	692.2	692.5	702.0	704.3	688.0	661.2
32.5°	707.4	710.2	702.8	685.1	683.2	702.0	702.8	715.6	719.2	706.0	684.9
35°	731.8	735.2	726.8	699.3	692.2	711.3	713.8	728.8	736.2	725.1	709.4
37.5°	792.9	783.1	771.6	727.6	712.8	726.0	730.2	747.6	760.7	747.9	738.6
40°	944.7	913.8	877.7	776.1	748.8	757.3	760.7	778.1	795.8	783.4	778.9
42.5°	1172.6	1136.0	1078.0	887.6	803.1	807.4	809.9	825.1	850.1	840.3	841.4
45°	1375.7	1362.4	1303.3	1078.0	904.8	884.0	887.0	894.9	931.8	928.1	935.5
47.5°	1531.7	1524.1	1478.5	1296.5	1076.6	977.7	986.5	990.1	1043.3	1056.3	1076.0
50°	1651.6	1648.8	1607.9	1490.8	1301.0	1116.0	1119.1	1111.2	1190.8	1223.0	1260.4
52.5°	1764.8	1774.4	1744.2	1671.3	1540.7	1297.0	1296.5	1259.3	1366.9	1415.3	1479.3
55°	1867.0	1870.4	1873.5	1855.5	1781.7	1503.2	1497.8	1437.0	1571.0	1621.1	1690.4
57.5°	1963.1	1964.4	1992.1	2029.0	2032.6	1724.6	1714.7	1641.7	1794.1	1829.8	1872.4
60°	2027.6	2034.0	2092.3	2194.8	2239.6	1952.9	1947.6	1873.2	2021.1	2037.7	2029.8
62.5°	1934.6	1974.0	2121.0	2324.4	2435.0	2206.1	2203.5	2133.7	2259.8	2246.3	2178.7
65°	1566.0	1632.7	1891.2	2411.9	2626.8	2488.8	2492.5	2418.1	2505.1	2461.2	2299.8
67.5°	1095.4	1165.8	1471.7	2419.0	2841.1	2820.8	2841.9	2725.4	2765.7	2667.0	2328.6
70°	757.5	793.9	992.9	2267.5	3008.1	3278.2	3277.5	3102.7	3024.7	2760.8	2182.1
72.5°	509.4	528.3	644.8	1798.9	2885.3	3549.9	3533.6	3391.0	3112.0	2582.0	1782.8
75°	214.8	228.7	298.5	1011.0	2282.7	3247.7	3203.5	2996.8	2765.0	2033.2	1112.3
77.5°	68.2	74.1	117.7	361.8	1257.4	2441.2	2394.5	1871.5	1853.2	1020.0	406.6
80°	32.4	37.7	66.2	145.3	494.8	1327.8	1321.2	849.0	797.2	275.4	81.7
82.5°	14.0	16.6	36.6	77.7	221.3	473.7	483.2	288.9	239.0	104.4	25.1
85°	4.5	5.9	16.9	35.8	93.5	117.7	116.3	68.7	96.4	56.9	8.7
87.5°	0.0	0.0	5.6	8.2	9.5	6.8	7.6	5.9	26.8	15.8	3.1
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°	451.9	451.9	451.9	451.9	451.9	451.9	451.9	451.9	451.9	451.9	451.9
2.5°	454.2	449.7	441.9	434.5	428.0	421.6	417.6	411.9	411.4	411.4	412.9
5°	457.4	450.0	435.9	421.0	403.8	387.4	371.2	355.4	350.3	346.7	348.3
7.5°	466.4	454.8	432.6	404.1	371.5	335.7	310.6	283.6	273.2	267.5	268.3
10°	479.3	463.5	429.7	379.9	327.0	278.2	242.4	213.2	201.9	197.1	197.1
12.5°	493.6	474.3	424.7	349.7	278.2	220.0	185.0	171.5	169.8	169.8	169.8
15°	510.9	487.2	415.9	314.3	227.2	174.0	161.6	162.2	163.9	165.0	165.0
17.5°	528.6	501.0	402.1	274.6	182.2	156.6	156.8	157.7	159.1	160.2	160.2
20°	547.8	514.8	383.9	232.4	156.3	151.5	152.3	153.2	154.4	154.9	155.2
22.5°	568.3	527.8	362.1	191.0	147.6	147.3	147.6	148.4	149.9	149.9	150.4
25°	590.2	542.1	337.3	160.8	143.1	143.1	143.6	144.2	145.3	145.3	145.5
27.5°	612.7	555.3	311.2	145.0	139.1	138.8	138.8	139.7	140.2	140.5	140.8
30°	637.6	570.8	285.0	141.7	136.0	134.6	133.8	134.3	134.9	135.2	135.7
32.5°	662.9	585.7	261.6	143.1	132.9	130.4	127.6	127.0	127.0	128.1	128.9
35°	691.1	602.1	243.5	147.8	131.2	124.2	119.7	117.2	117.5	119.1	119.9
37.5°	724.9	621.8	230.3	152.1	130.1	117.2	109.8	106.7	104.8	106.7	106.2
40°	769.1	650.8	220.8	155.5	128.7	109.0	99.1	94.1	90.4	91.5	90.9
42.5°	834.1	696.4	217.1	155.7	125.6	99.4	88.1	81.4	76.1	76.4	75.2
45°	925.4	768.4	236.0	152.1	118.8	89.0	76.6	67.5	64.2	63.3	62.2
47.5°	1050.4	873.5	279.6	144.4	109.0	78.8	65.3	57.7	55.1	53.8	52.9
50°	1217.9	1008.4	328.1	136.0	99.1	69.3	56.1	51.2	49.6	48.2	47.9
52.5°	1412.2	1145.2	367.8	127.6	89.3	60.8	50.1	47.4	45.9	44.8	44.5
55°	1590.5	1239.6	365.5	118.6	79.6	54.0	45.9	44.2	42.5	41.4	40.8
57.5°	1701.4	1252.9	301.3	108.6	68.7	48.7	41.9	40.8	38.8	37.4	37.2
60°	1752.4	1177.4	211.3	95.7	57.7	43.7	37.7	37.2	34.6	32.7	32.1
62.5°	1761.7	1037.1	140.8	79.6	48.2	38.8	33.5	32.7	29.3	25.9	24.2
65°	1723.9	836.6	97.5	62.2	41.1	33.8	28.7	27.1	23.4	20.0	18.9
67.5°	1604.5	587.4	67.9	44.8	35.0	26.8	22.9	22.2	19.5	16.6	15.8
70°	1385.8	334.9	45.3	33.5	27.6	18.3	18.0	18.6	15.8	13.5	12.4
72.5°	1062.5	153.2	28.2	24.5	18.9	12.4	14.3	14.7	12.1	10.1	9.0
75°	625.5	65.6	17.7	15.8	9.5	8.2	10.5	10.7	8.2	6.5	5.6
77.5°	212.9	24.8	11.3	9.3	4.8	4.5	6.8	6.8	4.5	2.6	1.9
80°	48.5	9.3	5.6	3.7	2.3	1.9	2.3	1.9	1.1	0.3	0.0
82.5°	13.8	3.7	2.3	1.4	0.8	0.8	0.3	0.0	0.0	0.0	0.0
85°	3.9	1.6	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.6	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)