

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: P960869

Luminaire Tested: **NAV-SB1D-735-U-SL3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960869
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-13)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-735-U-SL3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8402.9 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 79.6
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



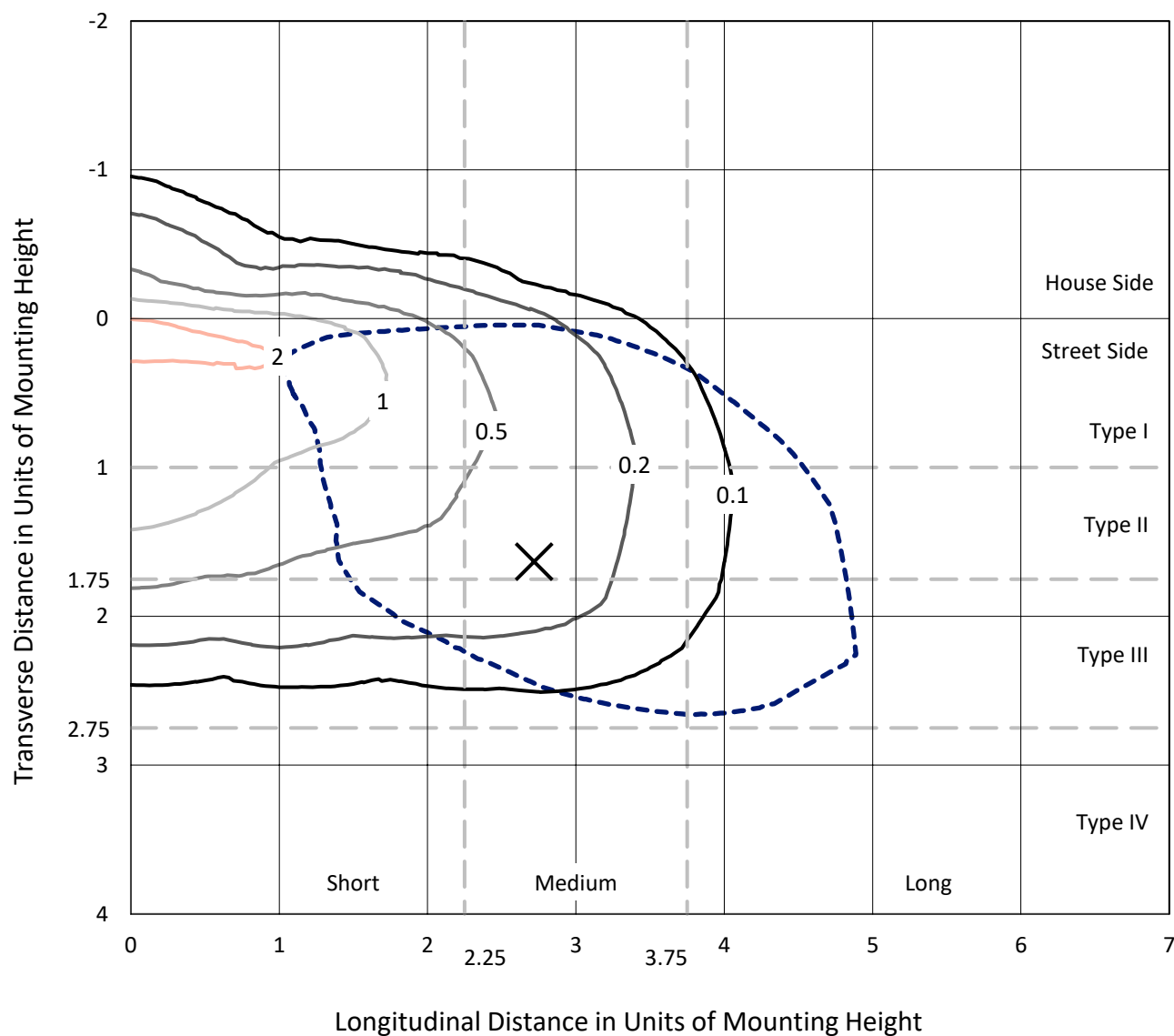
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

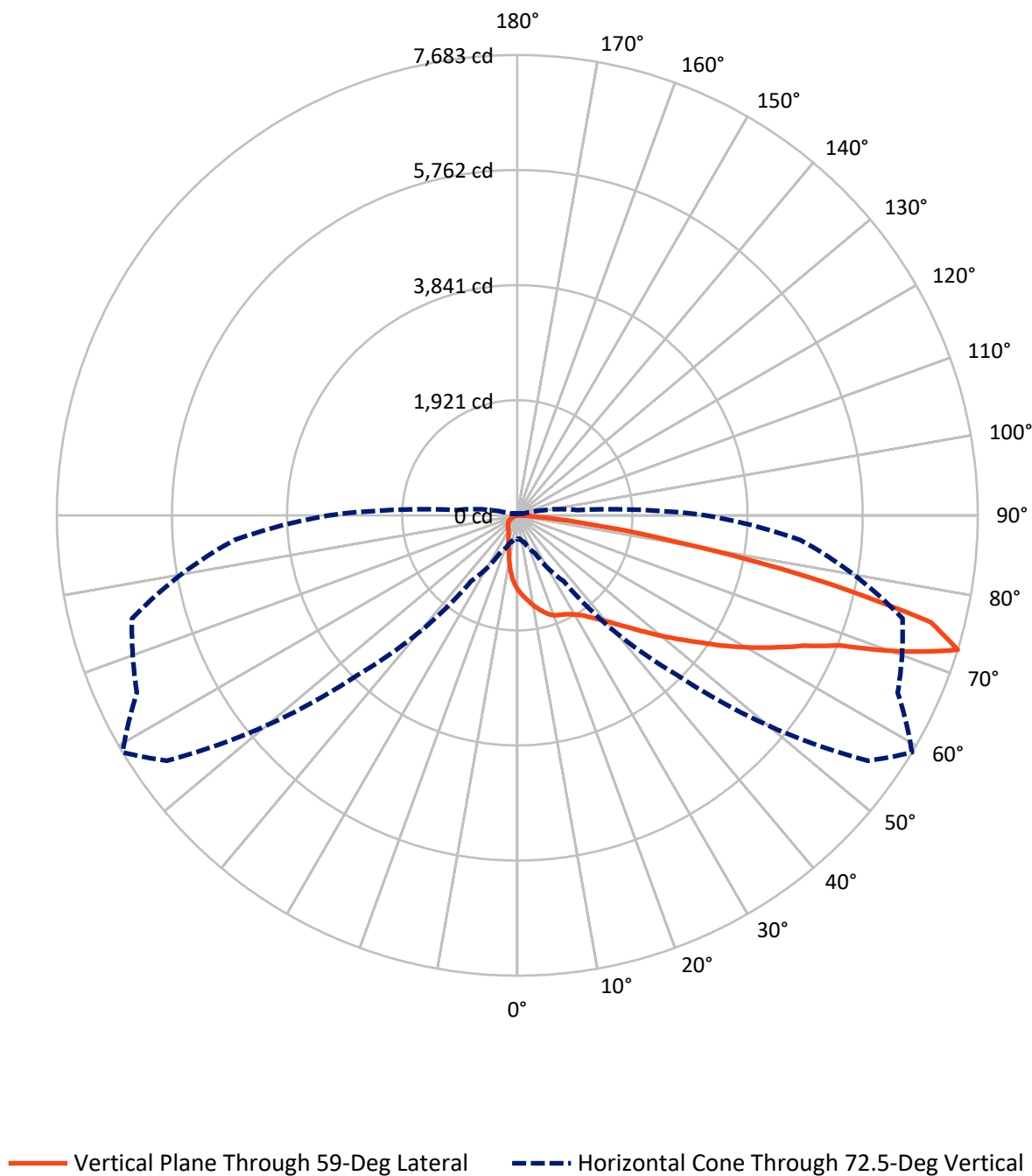


Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	887.5	0.0	887.5
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	7515.4	0.0	7515.4
	% Fixture	89.4	0.0	89.4
Total	Lumens	8402.9	0.0	8402.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.4	1.3
10°-20°	298.6	3.6
20°-30°	473.3	5.6
30°-40°	759.5	9.0
40°-50°	1213.0	14.4
50°-60°	1756.3	20.9
60°-70°	2084.3	24.8
70°-80°	1547.3	18.4
80°-90°	158.2	1.9
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°	8402.9	100.0
0°-180°	8402.9	100.0

Coefficient of Utilization



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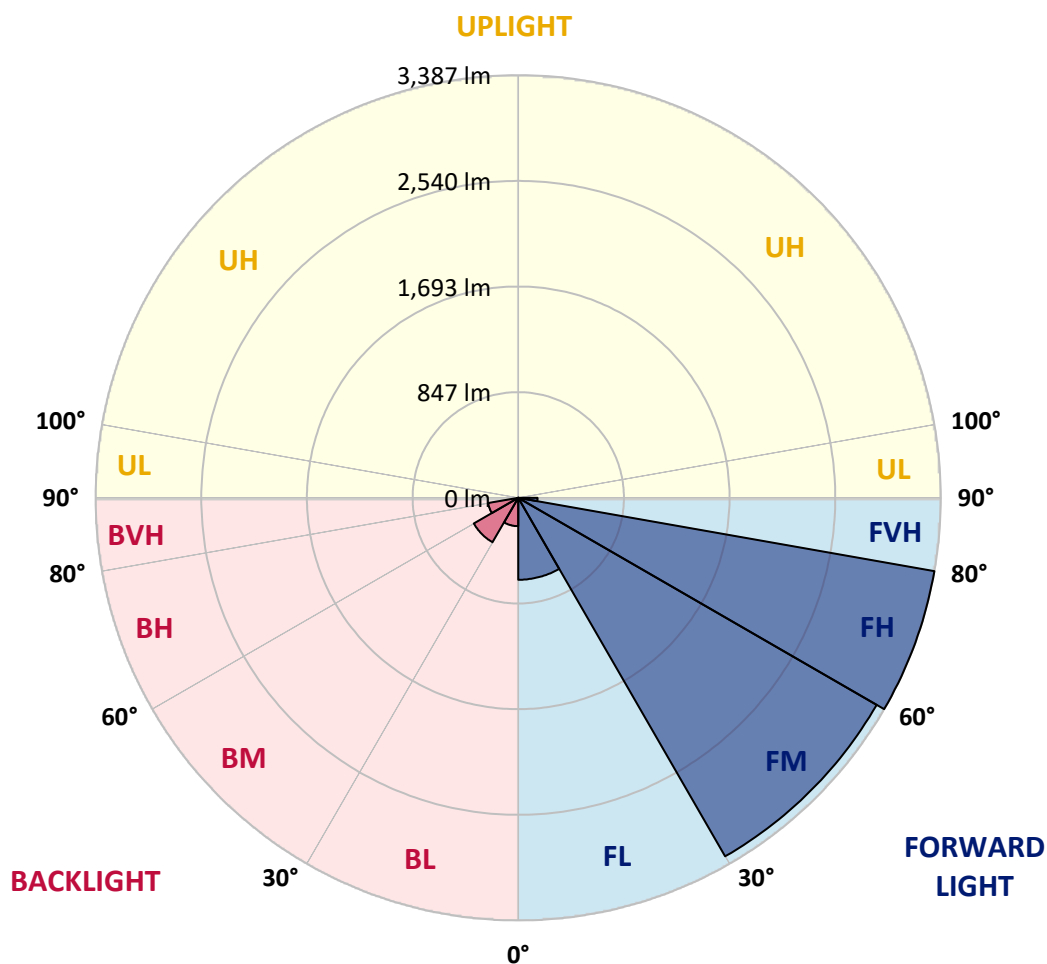
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	656.9	7.8			
FM	(30°-60°)	3317.4	39.5			
FH	(60°-80°)	3386.9	40.3			G2/5000
FVH	(80°-90°)	154.3	1.8			G2/225
BL	(0°-30°)	227.4	2.7	B1/500		
BM	(30°-60°)	411.5	4.9	B1/1000		
BH	(60°-80°)	244.7	2.9	B1/500		G1/500
BVH	(80°-90°)	3.9	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6
2.5°	1378.6	1370.9	1372.1	1358.9	1349.6	1339.7	1320.5	1317.7	1304.0	1279.9	1255.2
5°	1498.8	1493.8	1489.4	1474.7	1455.5	1431.3	1398.9	1387.4	1362.2	1320.5	1272.2
7.5°	1586.6	1580.6	1582.7	1567.9	1552.6	1525.7	1481.2	1459.8	1426.4	1362.7	1289.8
10°	1603.6	1600.3	1614.6	1620.0	1620.0	1603.0	1559.7	1538.3	1489.4	1408.2	1307.9
12.5°	1508.1	1508.7	1544.4	1587.1	1643.1	1659.0	1630.0	1606.9	1558.6	1456.5	1331.0
15°	1396.8	1397.3	1431.8	1486.8	1578.3	1669.9	1693.0	1678.2	1628.3	1508.7	1357.8
17.5°	1329.8	1327.1	1350.1	1395.1	1491.1	1620.0	1731.4	1741.3	1700.7	1566.3	1387.4
20°	1320.5	1315.6	1327.6	1350.1	1418.7	1557.5	1735.8	1782.5	1775.3	1631.6	1421.5
22.5°	1377.6	1369.9	1363.2	1364.4	1393.5	1505.4	1724.9	1805.4	1852.1	1710.0	1468.1
25°	1490.6	1478.5	1457.1	1429.7	1423.6	1494.4	1717.2	1830.8	1923.4	1810.4	1529.5
27.5°	1628.8	1611.8	1570.7	1529.5	1494.4	1525.1	1733.1	1870.7	2004.1	1927.3	1600.8
30°	1780.7	1759.9	1718.8	1640.9	1585.0	1593.7	1770.9	1923.4	2107.2	2059.4	1690.2
32.5°	2004.1	1955.8	1884.0	1764.8	1690.8	1667.8	1828.0	1990.3	2235.0	2235.5	1819.7
35°	2195.5	2168.7	2096.2	1948.1	1796.1	1766.0	1903.1	2084.7	2412.2	2468.7	2000.8
37.5°	2321.1	2284.4	2220.8	2109.3	1959.6	1866.9	2003.5	2200.5	2599.8	2734.3	2224.0
40°	2461.6	2425.4	2340.9	2236.1	2149.4	2040.3	2130.3	2333.8	2805.6	3006.9	2479.2
42.5°	2631.1	2583.9	2484.1	2371.1	2280.5	2268.5	2295.9	2500.0	3016.8	3303.2	2744.6
45°	2830.2	2785.8	2671.1	2528.6	2449.0	2427.6	2504.4	2693.7	3252.1	3628.0	3013.0
47.5°	3016.8	2965.2	2841.8	2711.7	2623.5	2555.9	2726.0	2922.5	3518.7	3967.6	3266.4
50°	3175.3	3122.7	3009.7	2870.8	2811.1	2722.7	2943.8	3177.5	3783.2	4312.6	3497.9
52.5°	3284.0	3237.4	3104.5	3010.2	2969.6	2925.1	3198.9	3448.0	4046.5	4628.6	3726.7
55°	3259.3	3217.6	3100.7	3094.2	3091.4	3138.0	3504.0	3754.7	4314.8	4927.6	3954.3
57.5°	3180.8	3133.6	2987.7	3088.1	3185.2	3327.9	3834.2	4117.3	4608.8	5209.6	4173.8
60°	2949.8	2933.4	2844.6	3076.6	3224.8	3513.8	4211.6	4481.6	4927.1	5457.5	4368.5
62.5°	2461.0	2475.3	2474.8	3100.7	3296.0	3725.6	4554.6	4850.2	5238.1	5696.2	4541.9
65°	1842.7	1892.2	1955.2	2883.5	3391.5	4103.6	4964.4	5250.2	5554.1	5973.8	4718.1
67.5°	1238.2	1277.7	1320.5	2365.6	3107.3	4500.8	5645.2	5798.2	5932.6	6281.5	4916.1
70°	708.8	721.4	781.3	1477.4	2395.2	4391.1	6753.9	6809.3	6497.2	6660.7	5060.3
72.5°	397.2	392.8	471.8	701.1	1338.6	3760.1	7142.3	7682.7	7002.4	6654.6	4738.4
75°	265.5	266.1	324.8	442.2	521.7	2632.2	6154.8	7123.6	6699.6	5900.8	3871.5
77.5°	181.0	187.1	238.6	341.7	241.4	1284.3	4071.8	4990.1	5424.1	4556.7	2672.8
80°	78.4	79.0	157.4	245.2	163.0	408.7	2111.1	2673.4	3401.9	2558.7	1058.8
82.5°	40.6	46.1	100.3	158.6	102.6	143.2	997.3	1168.0	1427.5	751.0	217.2
85°	14.2	17.0	62.0	77.9	51.6	51.0	347.3	353.8	302.3	113.1	59.8
87.5°	0.0	2.8	24.1	19.2	6.6	6.0	41.1	34.5	27.5	15.9	19.8
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°	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6	1242.6
2.5°	1243.7	1228.9	1204.8	1175.2	1140.5	1121.9	1095.0	1078.6	1063.7	1064.3	1076.4
5°	1245.4	1220.7	1159.2	1093.9	1021.5	968.3	909.1	867.4	835.6	827.9	839.4
7.5°	1250.3	1208.6	1108.2	999.6	878.8	789.5	707.7	656.1	627.1	619.4	627.1
10°	1256.9	1195.5	1050.6	884.4	734.6	627.1	559.0	526.1	512.9	503.1	509.1
12.5°	1262.4	1181.7	978.2	765.3	606.2	522.2	470.7	443.3	431.7	424.7	428.4
15°	1271.7	1163.6	899.7	654.5	519.6	451.0	402.1	381.8	378.5	379.7	381.3
17.5°	1281.0	1146.1	811.9	567.8	455.9	388.4	358.7	355.5	359.9	364.3	365.9
20°	1291.4	1120.8	723.0	502.6	397.2	345.1	337.4	339.6	341.7	349.4	351.7
22.5°	1306.8	1089.0	645.1	447.1	348.4	324.2	320.4	322.1	323.7	331.4	333.5
25°	1328.7	1054.9	582.1	396.1	317.6	307.2	303.4	303.4	305.6	312.7	315.5
27.5°	1351.8	1006.7	531.1	348.9	299.5	288.5	282.0	282.0	284.7	292.9	296.2
30°	1377.6	962.8	491.0	313.8	284.1	269.9	261.2	258.9	262.2	272.6	275.4
32.5°	1424.1	934.3	462.5	297.4	270.5	252.9	240.9	234.8	238.1	250.2	253.5
35°	1495.0	927.7	442.7	289.2	257.3	237.6	220.6	211.3	213.9	226.5	230.4
37.5°	1577.8	941.4	423.5	278.2	244.7	222.7	200.3	188.2	192.6	204.1	207.4
40°	1696.9	998.5	408.7	269.9	232.1	205.2	180.0	167.9	175.0	184.9	186.5
42.5°	1840.6	1099.9	404.9	262.2	216.7	186.5	161.3	152.5	158.0	167.3	168.9
45°	2018.8	1229.4	422.4	252.4	199.7	168.4	146.5	141.6	143.2	152.5	156.9
47.5°	2210.3	1362.2	470.7	243.5	184.9	153.6	135.0	130.6	129.5	138.3	143.7
50°	2404.0	1480.1	527.8	237.0	174.5	141.6	126.2	120.6	118.0	123.4	125.7
52.5°	2595.5	1574.0	565.1	226.0	164.0	129.5	118.5	110.3	105.4	108.0	110.3
55°	2789.6	1656.3	567.2	209.6	154.2	121.8	110.8	101.5	95.4	95.4	96.6
57.5°	2971.3	1728.7	534.8	187.6	140.4	114.7	100.3	92.8	86.1	83.9	84.5
60°	3132.0	1782.5	481.1	163.0	128.3	105.4	90.0	83.9	75.7	71.3	70.2
62.5°	3275.2	1808.7	407.6	137.7	113.6	94.4	80.1	73.5	62.5	57.1	56.5
65°	3396.4	1781.9	330.8	114.1	101.0	82.3	68.6	62.0	49.9	43.4	43.4
67.5°	3516.6	1659.0	250.2	96.0	87.7	69.1	56.5	50.4	41.7	36.2	36.2
70°	3531.9	1400.6	175.0	80.7	73.0	53.2	45.5	41.7	34.0	29.1	28.5
72.5°	3144.1	1007.8	106.4	65.8	57.1	37.8	36.2	32.9	25.2	21.9	21.4
75°	2513.2	617.8	62.5	49.4	37.8	26.9	26.9	23.6	17.0	14.2	14.2
77.5°	1736.9	323.1	36.8	31.8	22.4	15.9	17.5	14.2	8.2	6.6	6.6
80°	695.7	122.9	19.8	14.9	10.5	7.2	6.0	3.3	1.6	1.1	1.6
82.5°	138.8	32.4	6.6	3.8	3.8	1.6	0.0	0.0	0.0	0.0	0.0
85°	35.7	7.2	1.6	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.0	0.0	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)