

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: P961975

Luminaire Tested: **NAV-SB2B-740-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961975
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-SB2B-740-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9406.4 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

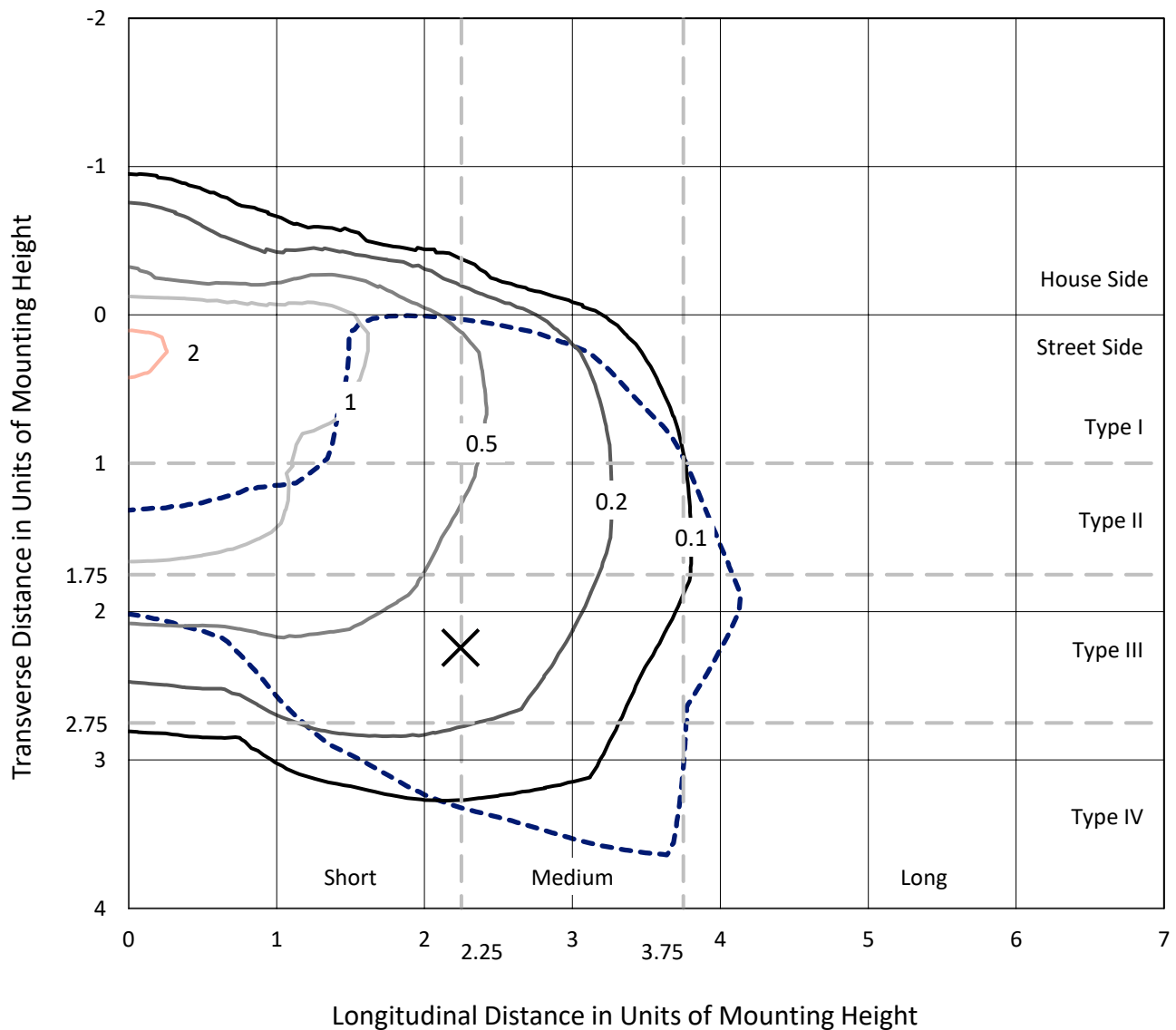
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

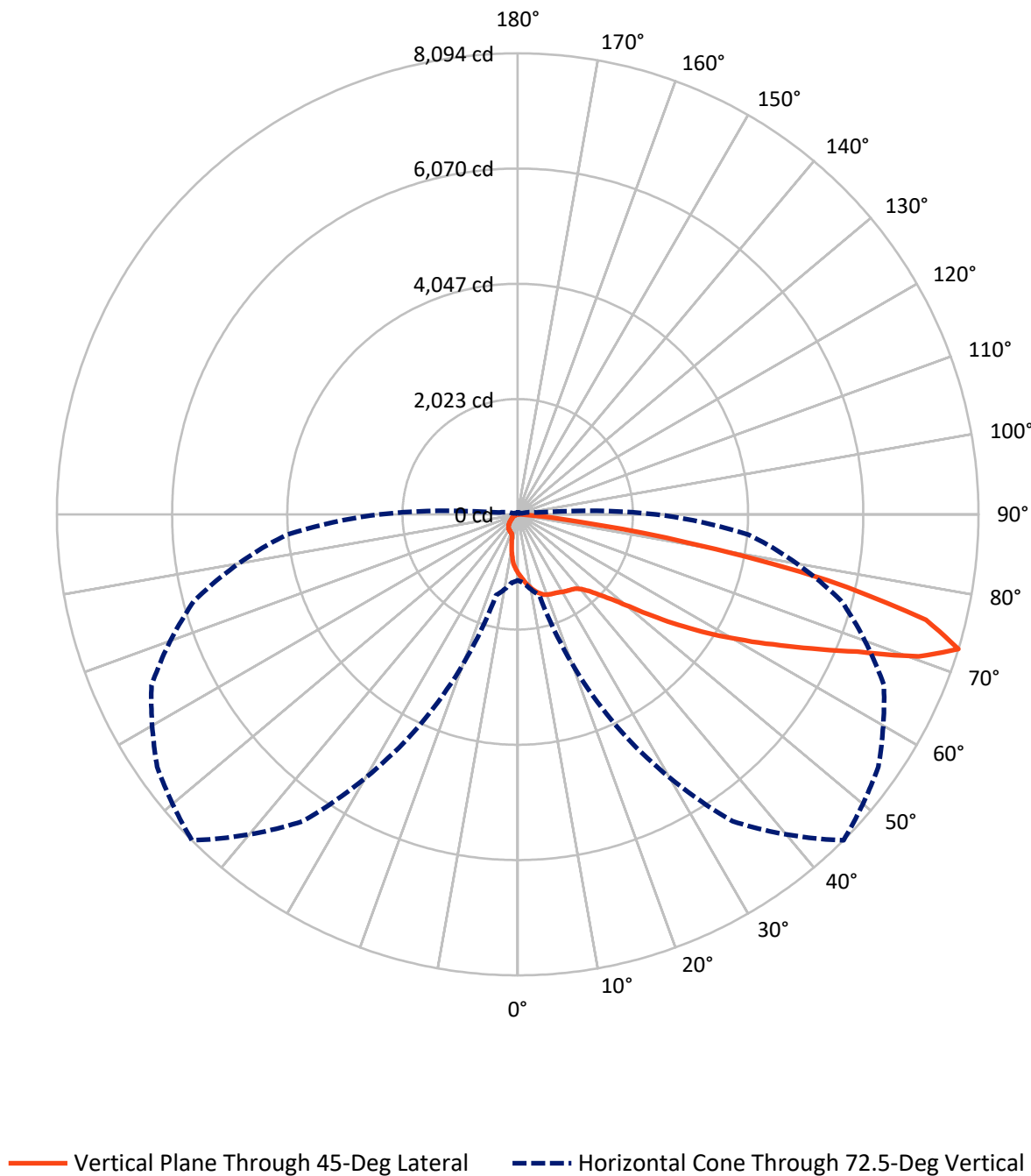
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 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	988.4	0.0	988.4
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	8418.1	0.0	8418.1
	% Fixture	89.5	0.0	89.5
Total	Lumens	9406.4	0.0	9406.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.1	1.0
10°-20°	283.8	3.0
20°-30°	466.0	5.0
30°-40°	660.9	7.0
40°-50°	1092.4	11.6
50°-60°	1962.3	20.9
60°-70°	2724.7	29.0
70°-80°	1976.4	21.0
80°-90°	142.9	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°	9406.4	100.0
0°-180°	9406.4	100.0

Coefficient of Utilization



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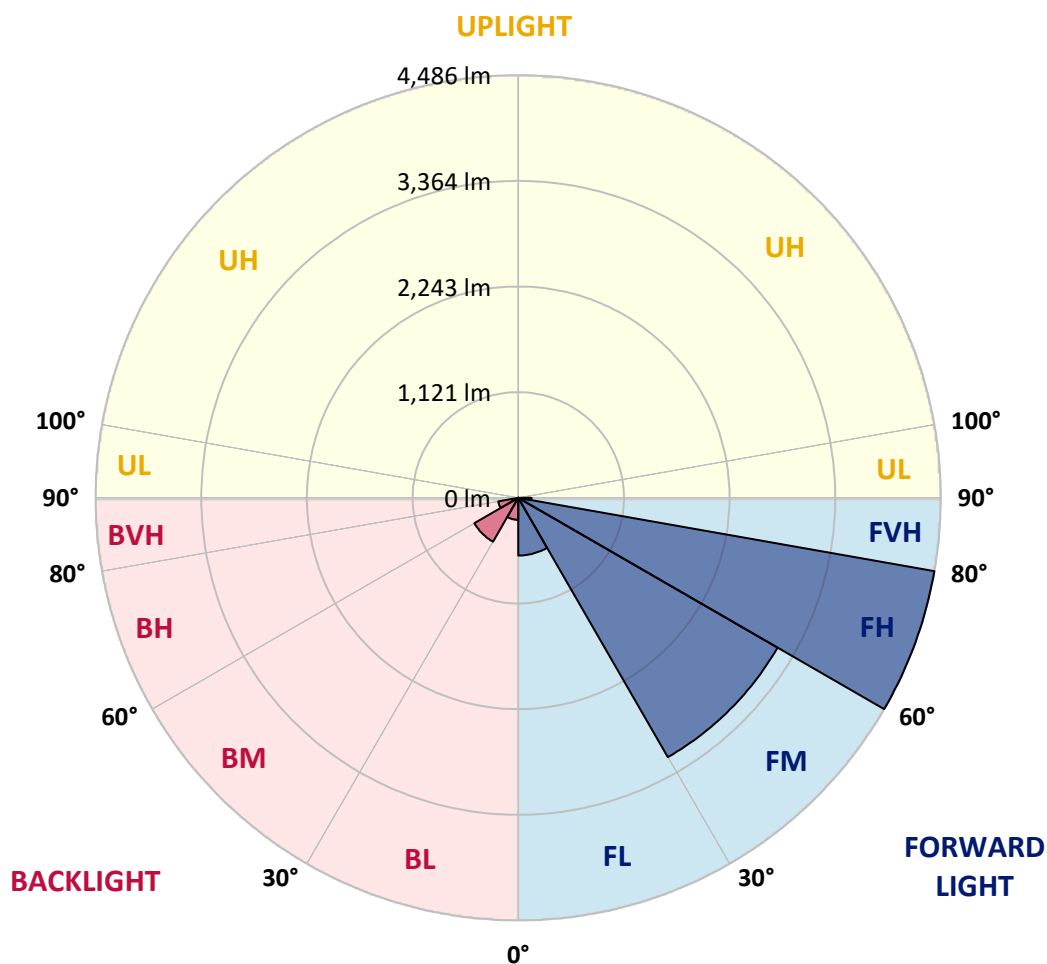
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	612.7	6.5			
FM	(30°-60°)	3178.0	33.8			
FH	(60°-80°)	4485.7	47.7			G2/5000
FVH	(80°-90°)	141.7	1.5			G2/225
BL	(0°-30°)	234.1	2.5	B1/500		
BM	(30°-60°)	537.5	5.7	B1/1000		
BH	(60°-80°)	215.5	2.3	B1/500		G1/500
BVH	(80°-90°)	1.2	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°	1030.5	1030.5	1030.5	1030.5	1030.5	1030.5	1030.5	1030.5	1030.5	1030.5	1030.5
2.5°	1125.6	1127.4	1126.2	1118.5	1105.6	1098.6	1094.7	1081.9	1073.5	1058.7	1043.3
5°	1228.9	1236.6	1232.0	1216.7	1192.3	1175.0	1169.8	1143.5	1119.7	1092.1	1060.1
7.5°	1338.6	1342.5	1334.1	1314.3	1281.6	1252.0	1247.5	1210.9	1173.0	1130.7	1087.0
10°	1433.7	1438.2	1425.4	1396.5	1359.3	1322.7	1316.2	1275.7	1230.8	1178.9	1123.0
12.5°	1513.3	1517.8	1501.1	1466.5	1425.4	1387.4	1381.1	1338.6	1289.2	1231.4	1162.1
15°	1573.7	1582.0	1559.5	1522.3	1478.0	1440.1	1436.9	1395.2	1347.1	1282.8	1209.0
17.5°	1608.9	1617.3	1596.1	1551.2	1513.3	1481.2	1477.3	1442.7	1397.8	1336.1	1254.6
20°	1614.8	1622.5	1600.0	1560.9	1529.4	1503.7	1501.7	1476.7	1444.0	1384.9	1304.0
22.5°	1597.5	1607.1	1586.5	1555.0	1533.2	1519.8	1517.2	1503.1	1484.4	1434.4	1350.2
25°	1579.4	1587.1	1571.7	1544.2	1532.6	1531.2	1533.2	1530.6	1526.8	1484.4	1404.1
27.5°	1578.2	1586.5	1569.2	1542.8	1536.5	1549.9	1551.8	1564.0	1567.2	1530.0	1456.2
30°	1589.1	1594.9	1578.2	1550.5	1547.3	1578.2	1578.8	1600.6	1605.8	1568.6	1507.6
32.5°	1612.8	1619.3	1602.6	1562.1	1557.6	1600.6	1602.6	1631.5	1639.8	1609.7	1561.5
35°	1668.7	1676.4	1657.1	1594.2	1578.2	1621.9	1627.6	1661.6	1678.3	1653.3	1617.3
37.5°	1808.0	1785.6	1759.2	1659.1	1625.0	1655.2	1664.8	1704.7	1734.2	1705.3	1684.1
40°	2154.0	2083.4	2001.3	1769.5	1707.2	1726.5	1734.2	1774.0	1814.5	1786.2	1775.9
42.5°	2673.5	2590.1	2457.7	2023.8	1831.2	1840.8	1846.5	1881.2	1938.4	1915.9	1918.5
45°	3136.4	3106.3	2971.4	2457.7	2062.9	2015.4	2022.4	2040.5	2124.5	2116.2	2132.9
47.5°	3492.1	3474.7	3370.8	2956.0	2454.6	2229.2	2249.2	2257.5	2378.8	2408.3	2453.2
50°	3765.6	3759.2	3666.1	3399.0	2966.2	2544.5	2551.5	2533.5	2715.2	2788.4	2873.8
52.5°	4023.7	4045.6	3976.9	3810.5	3512.7	2957.3	2956.0	2871.2	3116.5	3226.9	3372.7
55°	4256.8	4264.5	4271.6	4230.5	4062.3	3427.3	3415.1	3276.4	3582.0	3696.3	3854.2
57.5°	4475.8	4478.9	4541.9	4626.0	4634.3	3931.9	3909.5	3743.2	4090.5	4172.1	4269.0
60°	4622.8	4637.5	4770.5	5004.2	5106.2	4452.6	4440.4	4271.0	4608.0	4645.9	4627.9
62.5°	4410.9	4500.8	4836.0	5299.5	5551.8	5029.9	5024.0	4864.9	5152.5	5121.6	4967.6
65°	3570.5	3722.6	4312.1	5499.2	5989.1	5674.5	5682.8	5513.3	5711.7	5611.6	5243.6
67.5°	2497.6	2658.1	3355.3	5515.2	6477.7	6431.5	6479.6	6213.8	6305.6	6080.9	5309.1
70°	1727.1	1809.9	2263.9	5169.8	6858.4	7474.1	7472.9	7074.1	6896.3	6294.7	4975.2
72.5°	1161.4	1204.5	1470.3	4101.4	6578.4	8093.7	8056.5	7731.6	7095.4	5887.0	4064.8
75°	489.8	521.3	680.6	2304.9	5204.4	7404.8	7303.9	6832.8	6304.3	4635.7	2536.2
77.5°	155.4	168.8	268.3	825.0	2866.7	5566.0	5459.4	4267.1	4225.4	2325.5	927.1
80°	73.8	86.0	150.9	331.3	1128.1	3027.2	3012.5	1935.8	1817.6	627.9	186.2
82.5°	32.1	37.9	83.4	177.2	504.6	1079.9	1101.8	658.8	545.1	238.2	57.1
85°	10.2	13.5	38.5	81.6	213.2	268.3	265.2	156.6	219.6	129.7	19.9
87.5°	0.0	0.0	12.8	18.7	21.8	15.4	17.3	13.5	61.0	36.0	7.1
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°	1030.5	1030.5	1030.5	1030.5	1030.5	1030.5	1030.5	1030.5	1030.5	1030.5	1030.5
2.5°	1035.7	1025.3	1007.4	990.7	975.9	961.1	952.1	939.3	938.1	938.1	941.3
5°	1042.7	1026.0	993.9	959.9	920.7	883.4	846.2	810.3	798.7	790.4	794.2
7.5°	1063.2	1036.9	986.2	921.4	846.9	765.4	708.2	646.6	622.8	610.0	611.9
10°	1092.8	1056.8	979.8	866.1	745.4	634.4	552.8	486.1	460.3	449.5	449.5
12.5°	1125.6	1081.2	968.2	797.4	634.4	501.4	421.8	391.0	387.1	387.1	387.1
15°	1164.7	1110.8	948.3	716.6	518.1	396.8	368.5	369.8	373.7	376.3	376.3
17.5°	1205.1	1142.3	916.9	626.0	415.4	357.0	357.6	359.6	362.7	365.3	365.3
20°	1248.8	1173.6	875.1	529.7	356.3	345.4	347.4	349.3	351.9	353.1	353.7
22.5°	1295.7	1203.2	825.6	435.3	336.4	335.8	336.4	338.4	341.5	341.5	342.9
25°	1345.7	1235.9	769.2	366.6	326.2	326.2	327.5	328.7	331.3	331.3	331.9
27.5°	1397.1	1266.1	709.5	330.7	317.1	316.5	316.5	318.5	319.7	320.4	321.0
30°	1453.7	1301.4	649.7	323.0	310.1	306.9	304.9	306.3	307.5	308.2	309.4
32.5°	1511.4	1335.5	596.4	326.2	303.1	297.2	290.9	289.6	289.6	292.1	294.1
35°	1575.6	1372.7	555.3	337.1	299.2	283.1	272.9	267.1	267.7	271.6	273.5
37.5°	1652.6	1417.7	525.2	346.8	296.6	267.1	250.4	243.3	238.8	243.3	242.0
40°	1753.5	1483.8	503.4	354.4	293.5	248.5	226.0	214.4	206.1	208.7	207.4
42.5°	1901.8	1587.8	495.0	355.1	286.4	226.6	201.0	185.5	173.3	174.0	171.4
45°	2109.8	1752.1	538.0	346.8	270.9	202.8	174.7	154.1	146.4	144.4	141.9
47.5°	2394.8	1991.7	637.6	329.3	248.5	179.8	148.9	131.6	125.9	122.6	120.7
50°	2776.8	2299.2	747.9	310.1	226.0	158.0	127.8	116.8	113.0	109.8	109.2
52.5°	3219.9	2611.2	838.6	290.9	203.6	138.7	114.3	107.8	104.7	102.1	101.5
55°	3626.3	2826.3	833.4	270.3	181.7	123.3	104.7	100.8	97.0	94.4	93.1
57.5°	3879.3	2856.5	687.0	247.8	156.6	111.1	95.6	93.1	88.6	85.4	84.8
60°	3995.4	2684.4	481.5	218.3	131.6	99.5	86.0	84.8	78.9	74.5	73.2
62.5°	4016.7	2364.7	321.0	181.7	109.8	88.6	76.4	74.5	66.7	59.0	55.2
65°	3930.7	1907.5	222.1	141.9	93.8	77.1	65.5	61.6	53.3	45.6	43.0
67.5°	3658.4	1339.4	154.8	102.1	79.6	61.0	52.0	50.7	44.3	37.9	36.0
70°	3159.6	763.4	103.3	76.4	62.9	41.7	41.1	42.3	36.0	30.9	28.3
72.5°	2422.5	349.3	64.2	55.9	43.0	28.3	32.7	33.4	27.6	23.2	20.5
75°	1426.0	149.5	40.5	36.0	21.8	18.7	23.8	24.4	18.7	14.8	12.8
77.5°	485.4	56.5	25.7	21.2	10.9	10.2	15.4	15.4	10.2	5.7	4.5
80°	110.4	21.2	12.8	8.3	5.1	4.5	5.1	4.5	2.6	0.6	0.0
82.5°	31.5	8.3	5.1	3.2	1.9	1.9	0.6	0.0	0.0	0.0	0.0
85°	9.0	3.9	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	0.6	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)