

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: P964167

Luminaire Tested: **NAV-SB3B-827-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964167
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-SB3B-827-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11508.7 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 109.2
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



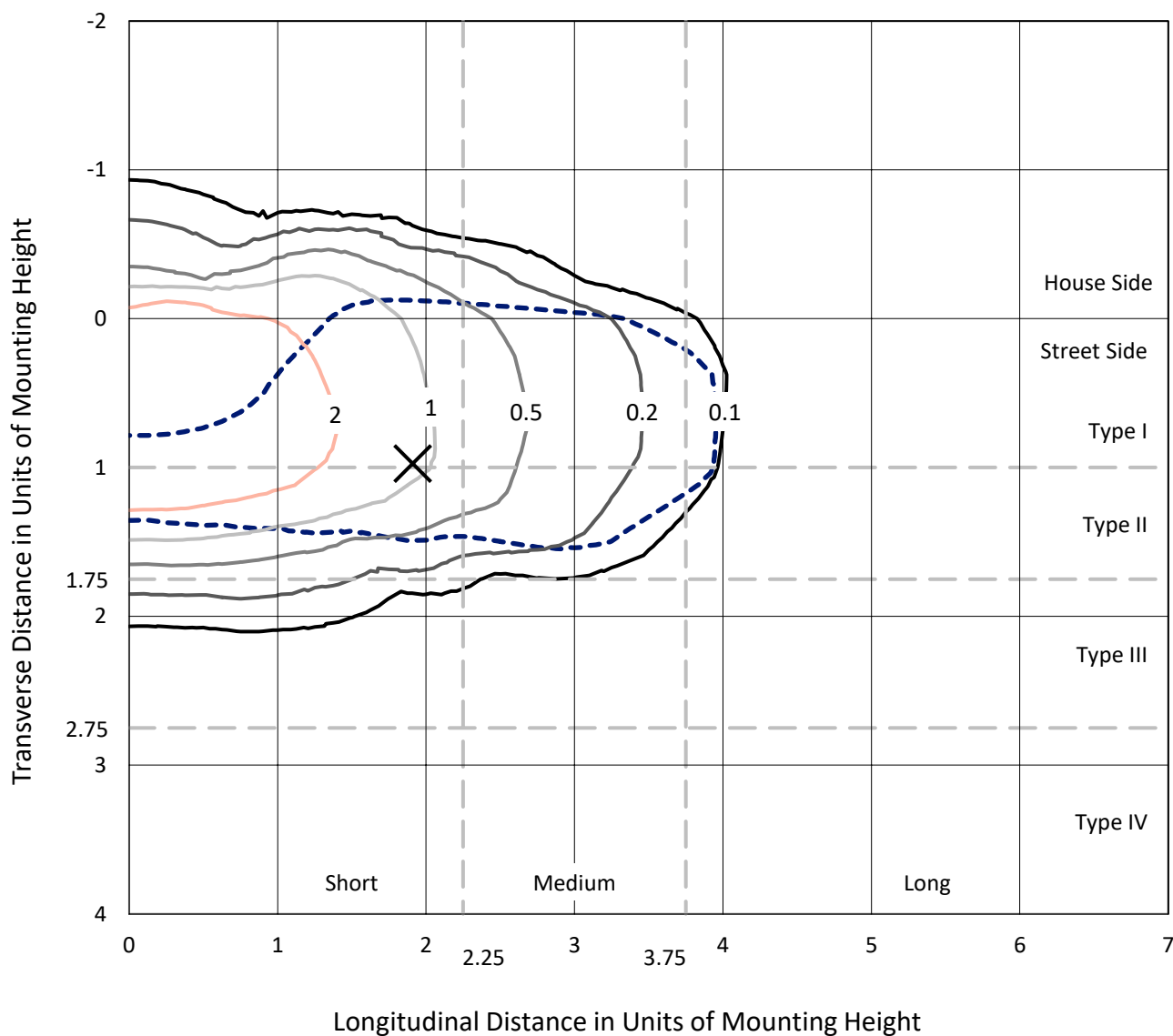
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

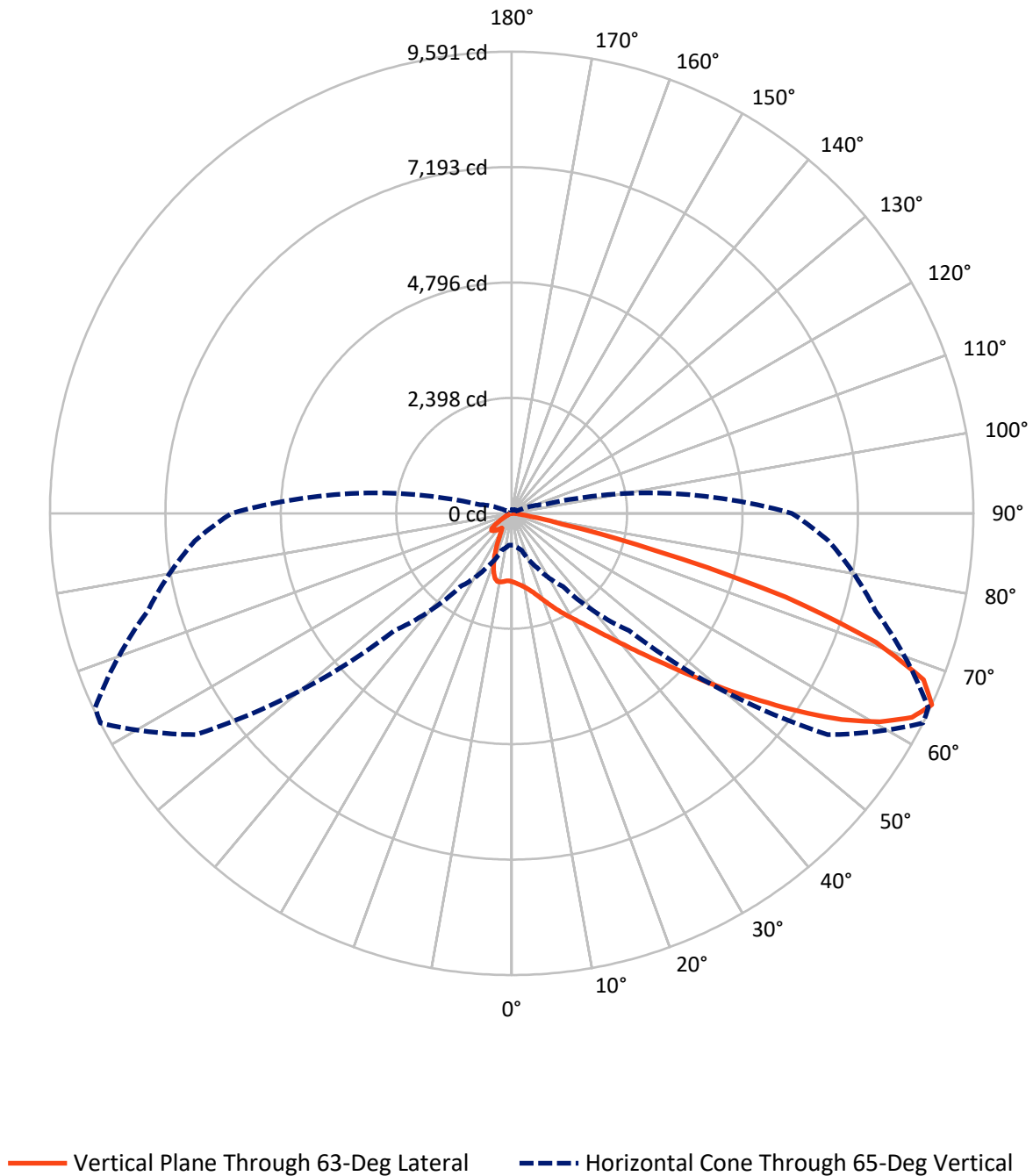


Based on 25 foot mounting height. Maximum calculated value = 3.9 fc

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	1691.7	0.0	1691.7
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	9817.0	0.0	9817.0
	% Fixture	85.3	0.0	85.3
Total	Lumens	11508.7	0.0	11508.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.8	1.2
10°-20°	371.3	3.2
20°-30°	646.6	5.6
30°-40°	1165.4	10.1
40°-50°	2311.3	20.1
50°-60°	3148.4	27.4
60°-70°	2513.0	21.8
70°-80°	1137.2	9.9
80°-90°	81.7	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°	11508.7	100.0
0°-180°	11508.7	100.0

Coefficient of Utilization



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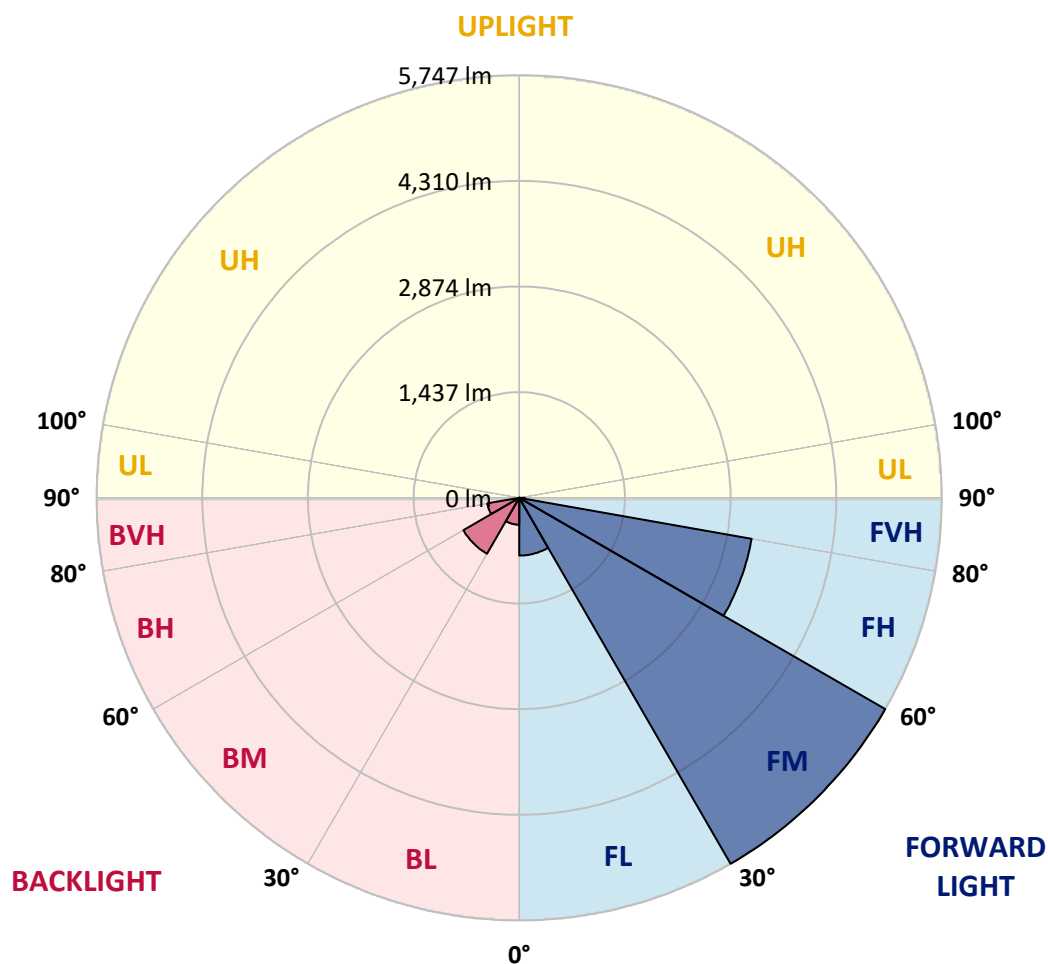
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	785.6	6.8			
FM	(30°-60°)	5747.2	49.9			
FH	(60°-80°)	3208.6	27.9			G2/5000
FVH	(80°-90°)	75.7	0.7			G1/100
BL	(0°-30°)	366.1	3.2	B1/500		
BM	(30°-60°)	877.9	7.6	B1/1000		
BH	(60°-80°)	441.6	3.8	B1/500		G1/500
BVH	(80°-90°)	6.1	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-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1420.3	1420.3	1420.3	1420.3	1420.3	1420.3	1420.3	1420.3	1420.3	1420.3	1420.3
2.5°	1453.7	1449.7	1455.2	1452.8	1451.3	1448.1	1446.5	1444.9	1441.8	1439.4	1429.9
5°	1457.7	1455.2	1460.7	1465.5	1470.3	1475.0	1477.4	1480.6	1477.4	1471.1	1461.5
7.5°	1424.3	1422.8	1434.7	1448.9	1470.3	1488.5	1508.3	1519.4	1520.2	1517.8	1507.5
10°	1422.0	1418.0	1429.9	1447.3	1475.0	1507.5	1542.3	1566.1	1569.3	1579.5	1568.5
12.5°	1459.2	1455.2	1471.9	1490.9	1519.4	1553.4	1596.1	1629.4	1634.2	1648.4	1640.5
15°	1521.7	1516.2	1535.2	1559.7	1596.1	1635.0	1680.1	1710.2	1714.1	1731.5	1717.3
17.5°	1594.6	1589.1	1611.2	1637.3	1676.9	1730.0	1782.2	1815.5	1820.2	1831.3	1805.2
20°	1688.0	1680.9	1698.3	1722.0	1764.0	1827.4	1889.9	1937.4	1936.6	1936.6	1893.9
22.5°	1796.5	1785.3	1800.4	1819.5	1859.0	1935.8	2018.9	2075.2	2075.2	2053.0	1982.6
25°	1912.9	1901.8	1918.4	1935.8	1970.7	2057.8	2155.2	2224.8	2227.9	2190.0	2077.6
27.5°	2058.5	2044.3	2057.0	2077.6	2098.2	2186.8	2302.4	2383.1	2384.8	2326.1	2167.8
30°	2338.8	2298.5	2258.9	2236.7	2246.2	2334.0	2457.5	2547.0	2554.9	2474.2	2266.0
32.5°	2851.9	2844.0	2704.6	2522.5	2427.5	2492.4	2631.0	2738.7	2743.4	2639.7	2393.5
35°	3649.2	3639.7	3415.6	3068.8	2759.2	2704.6	2841.6	2969.0	2965.8	2848.7	2558.9
37.5°	4600.8	4592.1	4296.8	3832.9	3331.7	3025.3	3113.1	3247.0	3266.8	3113.1	2772.7
40°	5413.9	5381.5	5194.6	4747.3	4091.7	3557.3	3499.6	3588.2	3608.8	3426.7	3044.2
42.5°	6030.0	6002.2	5907.2	5627.8	5011.7	4344.3	3954.8	3988.8	4011.7	3793.2	3356.2
45°	6349.1	6342.7	6380.6	6354.6	5949.2	5310.2	4605.6	4463.9	4472.6	4199.4	3710.1
47.5°	6394.2	6391.0	6564.4	6809.8	6755.2	6399.7	5440.9	5056.1	5025.2	4657.8	4094.9
50°	6128.1	6121.8	6454.3	6914.3	7293.6	7314.9	6389.3	5723.5	5655.4	5132.1	4496.4
52.5°	5278.5	5277.0	5823.3	6588.9	7482.8	8116.2	7326.8	6456.7	6342.7	5634.0	4920.7
55°	4061.7	4091.0	4717.3	5622.2	7137.6	8501.8	8168.4	7270.6	7095.7	6139.2	5311.9
57.5°	2877.2	2919.9	3539.1	4345.1	6067.2	8273.7	8737.7	8086.1	7897.6	6642.7	5708.5
60°	1545.5	1583.5	2203.4	3165.4	4513.7	7423.4	9037.7	8793.9	8615.7	7121.0	6066.4
62.5°	920.8	933.5	1190.0	2043.5	3053.0	5671.2	8910.3	9333.1	9186.7	7522.4	6377.5
65°	661.1	663.5	792.5	1247.8	1853.5	3445.6	8016.4	9591.2	9546.0	7824.8	6607.9
67.5°	556.6	555.0	608.8	828.9	1262.8	1726.0	6144.0	9226.2	9417.8	8016.4	6738.6
70°	477.4	479.8	543.1	607.3	949.3	977.0	3054.6	8033.0	8441.6	8067.1	6730.7
72.5°	355.5	363.4	422.0	553.4	716.6	672.2	1054.6	5956.3	6695.0	7600.8	6381.4
75°	251.0	254.9	296.9	465.6	534.4	489.3	538.4	3079.1	4026.0	5827.2	5223.1
77.5°	193.2	200.3	224.9	325.4	526.5	343.6	329.3	1065.7	1637.3	3520.1	3581.0
80°	104.6	117.2	162.3	235.1	369.7	243.0	163.1	424.4	555.0	1646.0	1380.8
82.5°	53.8	60.2	113.3	169.4	210.6	212.2	80.8	176.6	228.8	508.3	189.2
85°	21.4	26.1	76.1	93.4	108.4	104.6	36.4	71.2	82.3	140.9	57.8
87.5°	4.7	7.9	27.7	21.4	20.6	22.1	8.7	16.6	15.8	16.6	10.2
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°	1420.3	1420.3	1420.3	1420.3	1420.3	1420.3	1420.3	1420.3	1420.3	1420.3	1420.3
2.5°	1429.1	1426.0	1417.3	1407.7	1396.7	1390.3	1386.3	1385.6	1380.1	1376.1	1380.1
5°	1452.8	1449.7	1433.1	1413.3	1391.8	1375.2	1359.5	1345.2	1324.6	1320.6	1319.1
7.5°	1500.4	1491.7	1464.7	1437.8	1397.4	1349.1	1290.6	1223.2	1163.1	1144.8	1136.1
10°	1558.9	1547.0	1513.0	1465.5	1376.1	1244.7	1102.9	971.5	866.9	837.6	826.6
12.5°	1625.4	1615.2	1570.0	1482.1	1286.6	1048.3	831.4	668.2	566.9	541.5	534.4
15°	1704.7	1689.6	1627.1	1456.8	1126.7	796.5	570.8	474.3	437.9	433.1	428.3
17.5°	1788.5	1764.0	1677.7	1365.7	911.3	566.1	441.0	413.3	397.5	392.7	390.3
20°	1865.4	1833.7	1707.8	1227.9	680.9	441.0	395.0	376.9	362.6	357.1	353.9
22.5°	1942.2	1897.1	1707.8	1040.4	510.7	391.1	362.6	346.0	329.3	322.3	318.3
25°	2022.1	1962.0	1677.7	831.4	410.9	358.6	331.8	313.5	299.3	290.6	287.4
27.5°	2099.7	2016.6	1608.8	633.3	365.8	330.2	303.2	285.8	272.3	266.0	266.0
30°	2173.3	2070.4	1512.2	480.6	336.5	302.5	277.2	262.1	248.6	242.3	243.0
32.5°	2273.1	2138.5	1409.3	394.3	311.2	276.3	253.4	239.1	227.2	222.5	222.5
35°	2411.6	2239.0	1320.6	387.1	289.8	254.9	232.0	218.5	206.6	202.6	202.6
37.5°	2608.0	2401.4	1273.9	434.7	272.3	236.0	214.5	200.3	189.2	186.0	185.2
40°	2850.3	2621.4	1299.3	482.2	260.5	219.4	198.7	184.5	175.0	171.0	170.3
42.5°	3137.7	2893.1	1439.4	518.5	252.6	205.1	183.7	167.9	161.5	159.9	159.9
45°	3467.9	3191.5	1653.9	557.4	239.8	191.6	168.6	156.7	152.0	151.2	150.5
47.5°	3843.1	3519.3	1902.6	605.7	227.2	179.0	156.7	148.8	144.9	143.3	143.3
50°	4215.2	3849.5	2158.3	632.6	216.9	167.1	147.3	140.9	137.8	136.9	136.9
52.5°	4604.8	4189.2	2365.0	607.3	208.3	157.5	139.3	134.6	131.4	130.7	130.7
55°	4976.2	4463.9	2400.5	515.5	190.9	148.0	130.7	128.2	124.3	124.3	123.5
57.5°	5296.0	4601.6	2148.8	378.4	173.4	133.8	122.0	119.5	116.3	115.6	114.8
60°	5589.7	4562.1	1658.8	254.9	154.4	119.5	110.8	109.3	106.1	102.1	101.4
62.5°	5755.2	4387.8	1134.6	166.3	135.4	104.6	98.2	97.4	90.3	82.3	80.8
65°	5817.7	4030.0	707.9	121.2	113.3	89.5	84.8	83.1	72.9	64.2	63.3
67.5°	5763.2	3440.9	357.1	95.8	89.5	74.4	69.7	69.7	62.5	54.6	53.8
70°	5544.6	2579.5	150.5	76.8	68.9	57.0	57.0	60.2	53.1	44.4	43.6
72.5°	5070.4	1735.5	79.9	58.6	51.5	40.4	46.7	49.1	41.9	33.2	33.2
75°	4030.8	1058.5	55.5	43.6	32.5	28.5	35.7	37.2	28.5	22.1	21.4
77.5°	2756.8	608.0	37.2	27.7	20.6	16.6	24.5	23.0	15.1	10.2	11.1
80°	1210.6	253.4	21.4	12.7	7.9	6.4	8.7	6.4	4.7	3.2	3.2
82.5°	141.8	59.3	7.9	4.7	3.2	1.5	0.8	0.0	0.0	0.0	0.0
85°	29.3	7.2	4.0	1.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.5	1.5	0.8	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)