

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: P964043

Luminaire Tested: **NAV-SB3B-735-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964043
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-735-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 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: 13234.8 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - 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

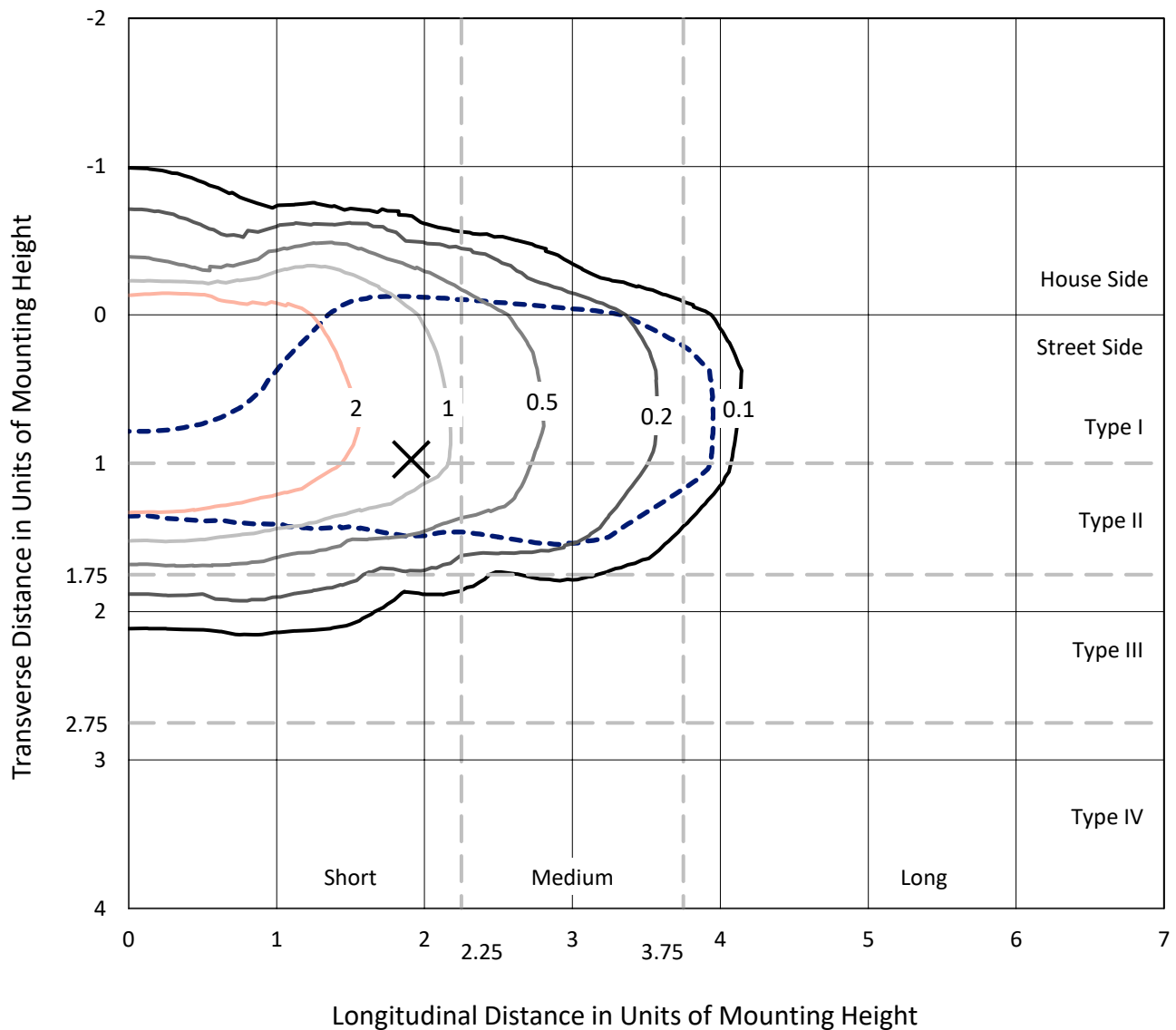


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Iso-Footcandle Lines of Horizontal Illumination

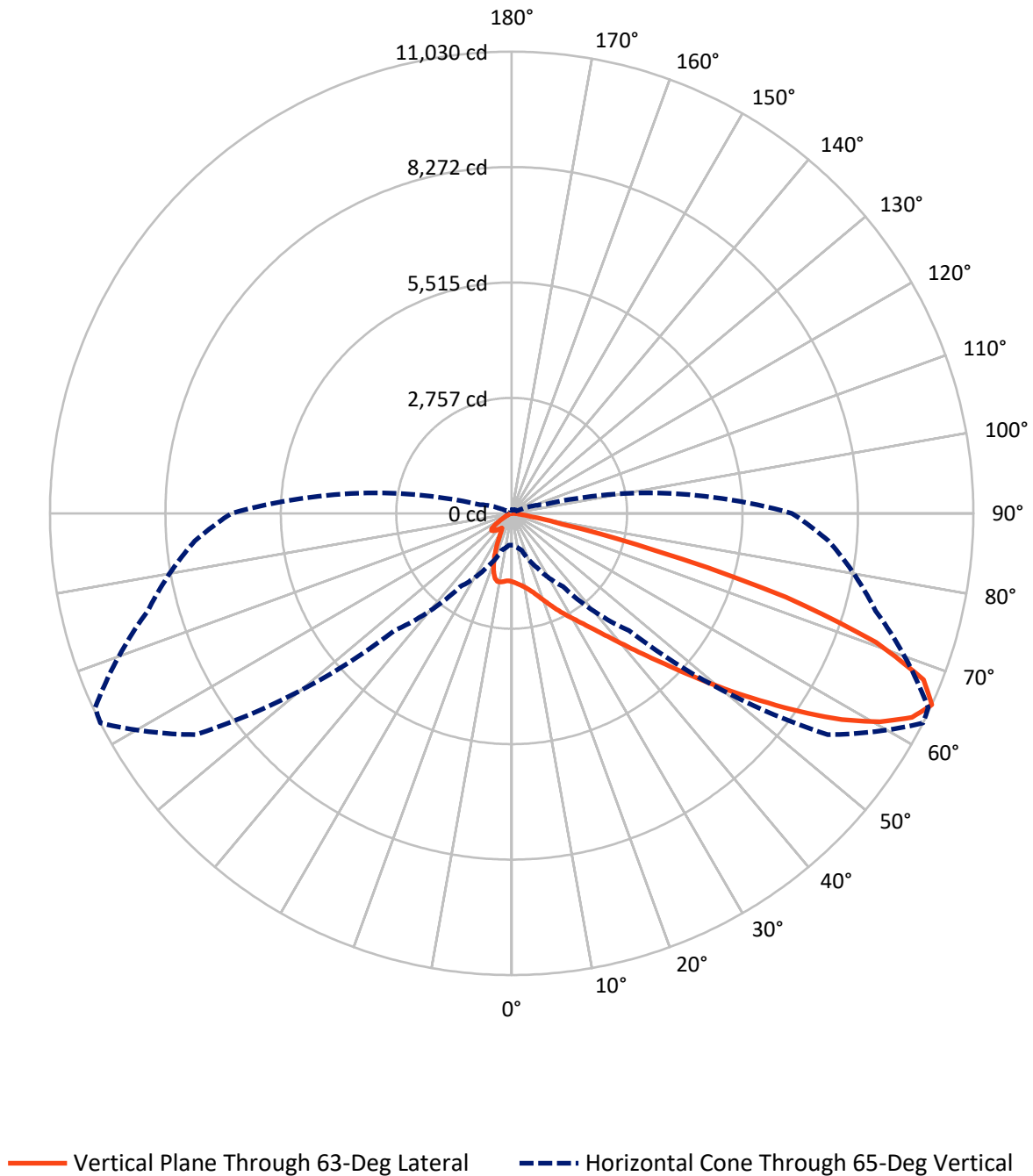
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 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	1945.4	0.0	1945.4
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	11289.4	0.0	11289.4
	% Fixture	85.3	0.0	85.3
Total	Lumens	13234.8	0.0	13234.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.9	1.2
10°-20°	427.0	3.2
20°-30°	743.5	5.6
30°-40°	1340.2	10.1
40°-50°	2658.0	20.1
50°-60°	3620.6	27.4
60°-70°	2889.9	21.8
70°-80°	1307.7	9.9
80°-90°	94.0	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°	13234.8	100.0
0°-180°	13234.8	100.0

Coefficient of Utilization



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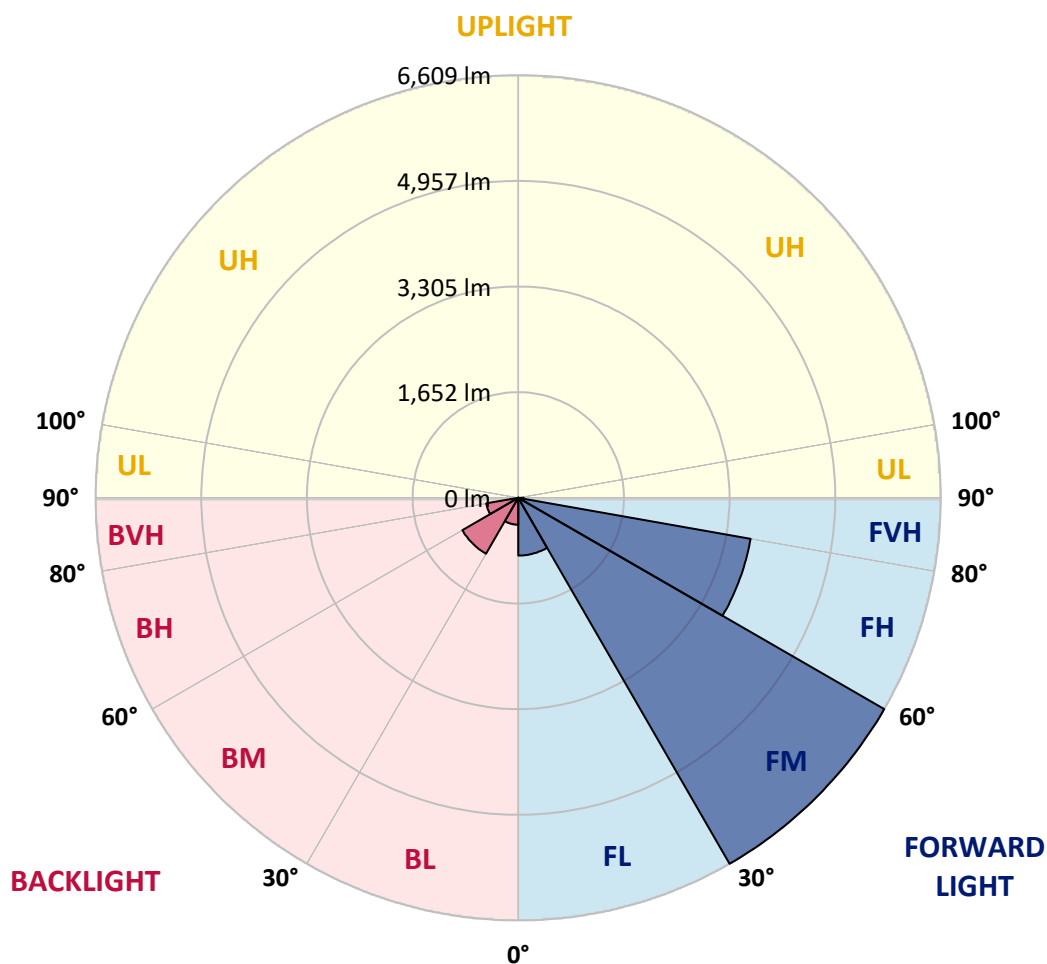
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	903.4	6.8			
FM	(30°-60°)	6609.1	49.9			
FH	(60°-80°)	3689.8	27.9			G2/5000
FVH	(80°-90°)	87.0	0.7			G1/100
BL	(0°-30°)	421.0	3.2	B1/500		
BM	(30°-60°)	1009.6	7.6	B2/2500		
BH	(60°-80°)	507.9	3.8	B2/1000		G2/1000
BVH	(80°-90°)	7.0	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1633.4	1633.4	1633.4	1633.4	1633.4	1633.4	1633.4	1633.4	1633.4	1633.4	1633.4
2.5°	1671.7	1667.2	1673.5	1670.7	1668.9	1665.3	1663.5	1661.6	1658.0	1655.3	1644.3
5°	1676.2	1673.5	1679.9	1685.3	1690.7	1696.3	1698.9	1702.6	1698.9	1691.7	1680.8
7.5°	1637.9	1636.1	1649.8	1666.2	1690.7	1711.7	1734.5	1747.2	1748.1	1745.4	1733.6
10°	1635.3	1630.7	1644.3	1664.4	1696.3	1733.6	1773.7	1800.9	1804.6	1816.4	1803.7
12.5°	1678.0	1673.5	1692.6	1714.4	1747.2	1786.4	1835.6	1873.8	1879.2	1895.6	1886.5
15°	1750.0	1743.6	1765.5	1793.6	1835.6	1880.2	1932.0	1966.7	1971.2	1991.3	1974.9
17.5°	1833.7	1827.4	1852.9	1882.9	1928.4	1989.4	2049.5	2087.7	2093.3	2106.0	2075.9
20°	1941.1	1932.9	1953.0	1980.3	2028.6	2101.5	2173.3	2227.9	2227.0	2227.0	2177.9
22.5°	2065.9	2053.2	2070.5	2092.3	2137.8	2226.2	2321.7	2386.4	2386.4	2360.9	2279.9
25°	2199.8	2187.0	2206.1	2226.2	2266.2	2366.4	2478.3	2558.5	2562.1	2518.4	2389.2
27.5°	2367.2	2350.9	2365.5	2389.2	2412.8	2514.7	2647.7	2740.5	2742.4	2675.0	2492.9
30°	2689.6	2643.2	2597.7	2572.1	2583.1	2684.2	2826.1	2929.0	2938.2	2845.3	2605.9
32.5°	3279.6	3270.5	3110.3	2900.9	2791.6	2866.2	3025.6	3149.4	3154.8	3035.5	2752.4
35°	4196.5	4185.5	3927.9	3529.1	3173.1	3110.3	3267.8	3414.4	3410.7	3276.0	2942.7
37.5°	5290.8	5280.9	4941.2	4407.7	3831.3	3479.0	3580.0	3734.0	3756.7	3580.0	3188.6
40°	6226.0	6188.6	5973.7	5459.4	4705.5	4090.9	4024.4	4126.3	4150.0	3940.6	3500.9
42.5°	6934.3	6902.5	6793.2	6471.7	5763.4	4995.8	4547.9	4587.1	4613.4	4362.2	3859.5
45°	7301.3	7294.0	7337.7	7307.6	6841.5	6106.6	5296.4	5133.4	5143.3	4829.3	4266.6
47.5°	7353.1	7349.5	7548.9	7831.1	7768.4	7359.5	6256.9	5814.4	5779.0	5356.4	4709.1
50°	7047.2	7039.9	7422.3	7951.3	8387.5	8412.1	7347.7	6581.9	6503.6	5901.8	5170.7
52.5°	6070.3	6068.4	6696.6	7577.1	8605.1	9333.4	8425.7	7425.1	7294.0	6479.0	5658.7
55°	4670.8	4704.5	5424.7	6465.4	8208.1	9776.9	9393.5	8361.0	8159.8	7060.0	6108.5
57.5°	3308.7	3357.9	4069.9	4996.8	6977.1	9514.7	10048.2	9298.9	9082.2	7639.0	6564.6
60°	1777.2	1821.0	2533.9	3640.2	5190.7	8536.8	10393.3	10112.9	9908.0	8188.9	6976.2
62.5°	1058.9	1073.5	1368.5	2350.0	3510.8	6521.9	10246.7	10732.9	10564.5	8650.6	7334.0
65°	760.2	763.0	911.4	1434.9	2131.5	3962.4	9218.7	11029.7	10977.9	8998.4	7598.9
67.5°	640.1	638.3	700.2	953.2	1452.2	1984.9	7065.4	10610.0	10830.4	9218.7	7749.2
70°	549.0	551.8	624.6	698.3	1091.7	1123.5	3512.7	9237.8	9707.7	9277.0	7740.1
72.5°	408.8	417.9	485.3	636.4	824.0	773.1	1212.8	6849.7	7699.1	8740.7	7338.6
75°	288.6	293.2	341.4	535.4	614.6	562.7	619.1	3540.9	4629.8	6701.2	6006.5
77.5°	222.1	230.3	258.6	374.2	605.5	395.1	378.7	1225.5	1882.9	4048.0	4118.1
80°	120.2	134.8	186.7	270.4	425.2	279.5	187.6	488.0	638.3	1892.9	1587.9
82.5°	61.9	69.2	130.2	194.9	242.2	244.1	92.9	203.1	263.1	584.6	217.6
85°	24.6	30.0	87.4	107.4	124.7	120.2	41.9	81.9	94.7	162.1	66.4
87.5°	5.4	9.1	31.9	24.6	23.7	25.5	10.0	19.2	18.2	19.2	11.8
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°	1633.4	1633.4	1633.4	1633.4	1633.4	1633.4	1633.4	1633.4	1633.4	1633.4	1633.4
2.5°	1643.5	1639.8	1629.7	1618.9	1606.1	1598.8	1594.3	1593.4	1587.0	1582.4	1587.0
5°	1670.7	1667.2	1648.0	1625.2	1600.6	1581.6	1563.3	1546.9	1523.3	1518.7	1516.9
7.5°	1725.4	1715.3	1684.4	1653.4	1607.0	1551.4	1484.1	1406.7	1337.5	1316.6	1306.6
10°	1792.7	1779.1	1739.9	1685.3	1582.4	1431.3	1268.3	1117.1	997.0	963.3	950.6
12.5°	1869.3	1857.4	1805.5	1704.5	1479.6	1205.5	956.0	768.4	651.9	622.8	614.6
15°	1960.3	1943.0	1871.0	1675.3	1295.6	915.9	656.5	545.4	503.5	498.0	492.6
17.5°	2056.8	2028.6	1929.4	1570.6	1048.0	651.0	507.2	475.3	457.0	451.6	448.8
20°	2145.1	2108.7	1963.9	1412.1	783.0	507.2	454.4	433.4	417.0	410.6	407.0
22.5°	2233.5	2181.5	1963.9	1196.4	587.2	449.8	417.0	397.9	378.7	370.5	366.0
25°	2325.4	2256.2	1929.4	956.0	472.5	412.5	381.5	360.6	344.2	334.2	330.5
27.5°	2414.6	2319.1	1850.1	728.4	420.7	379.7	348.7	328.7	313.2	306.0	306.0
30°	2499.3	2381.0	1739.0	552.7	386.9	347.8	318.7	301.3	285.9	278.6	279.5
32.5°	2614.1	2459.3	1620.6	453.5	357.8	317.8	291.4	275.0	261.3	255.8	255.8
35°	2773.3	2574.9	1518.7	445.3	333.2	293.2	266.8	251.3	237.6	233.1	233.1
37.5°	2999.1	2761.6	1465.0	499.9	313.2	271.3	246.7	230.3	217.6	213.9	213.1
40°	3277.7	3014.6	1494.1	554.5	299.5	252.3	228.6	212.2	201.2	196.7	195.8
42.5°	3608.3	3326.9	1655.3	596.3	290.5	235.9	211.3	193.0	185.7	183.9	183.9
45°	3988.0	3670.2	1902.0	641.0	275.9	220.4	193.9	180.3	174.9	173.9	173.0
47.5°	4419.5	4047.1	2188.0	696.5	261.3	205.8	180.3	171.2	166.7	164.8	164.8
50°	4847.4	4426.8	2482.0	727.4	249.5	192.1	169.3	162.1	158.5	157.5	157.5
52.5°	5295.5	4817.4	2719.6	698.3	239.4	181.2	160.2	154.8	151.2	150.3	150.3
55°	5722.5	5133.4	2760.6	592.8	219.5	170.3	150.3	147.5	143.0	143.0	142.1
57.5°	6090.2	5291.8	2471.1	435.2	199.4	153.9	140.2	137.5	133.9	132.9	132.0
60°	6428.1	5246.3	1907.5	293.2	177.5	137.5	127.5	125.7	122.0	117.5	116.5
62.5°	6618.3	5046.0	1304.7	191.2	155.7	120.2	112.9	112.0	103.8	94.7	92.9
65°	6690.3	4634.4	814.0	139.3	130.2	102.9	97.4	95.6	83.7	73.8	72.9
67.5°	6627.4	3957.0	410.6	110.2	102.9	85.6	80.2	80.2	72.0	62.8	61.9
70°	6376.2	2966.4	173.0	88.4	79.2	65.6	65.6	69.2	61.0	50.9	50.1
72.5°	5830.8	1995.8	91.9	67.3	59.1	46.4	53.7	56.5	48.3	38.2	38.2
75°	4635.4	1217.3	63.8	50.1	37.3	32.8	41.0	42.7	32.8	25.5	24.6
77.5°	3170.3	699.3	42.7	31.9	23.7	19.2	28.2	26.4	17.3	11.8	12.7
80°	1392.2	291.4	24.6	14.6	9.1	7.3	10.0	7.3	5.4	3.7	3.7
82.5°	163.0	68.3	9.1	5.4	3.7	1.8	0.9	0.0	0.0	0.0	0.0
85°	33.7	8.2	4.5	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.4	1.8	0.9	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)