

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: P964074

Luminaire Tested: **NAV-SB3B-740-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964074
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-740-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 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: 14002.5 lumens
Efficiency: N/A
Efficacy: 128.2 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

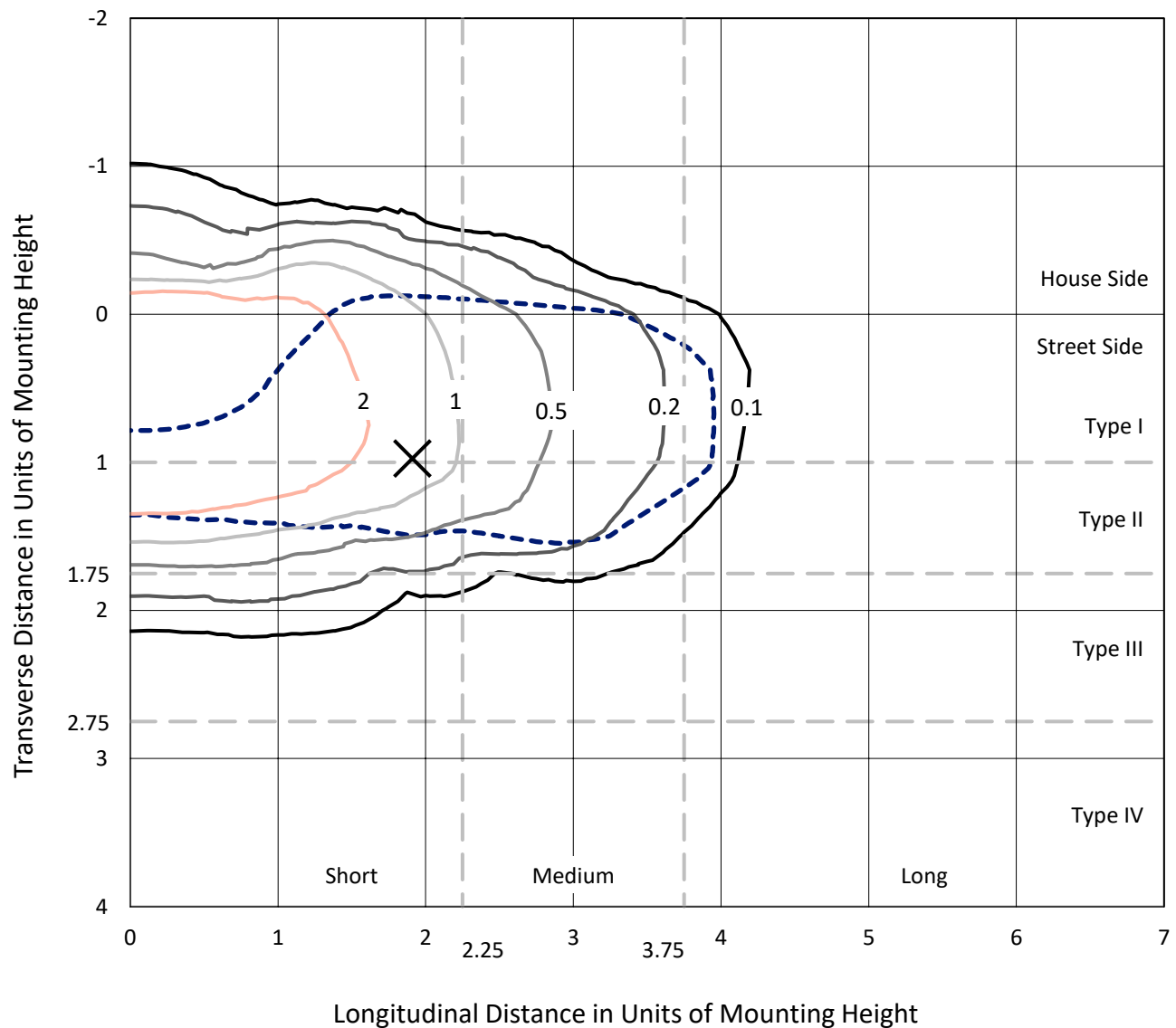


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Iso-Footcandle Lines of Horizontal Illumination

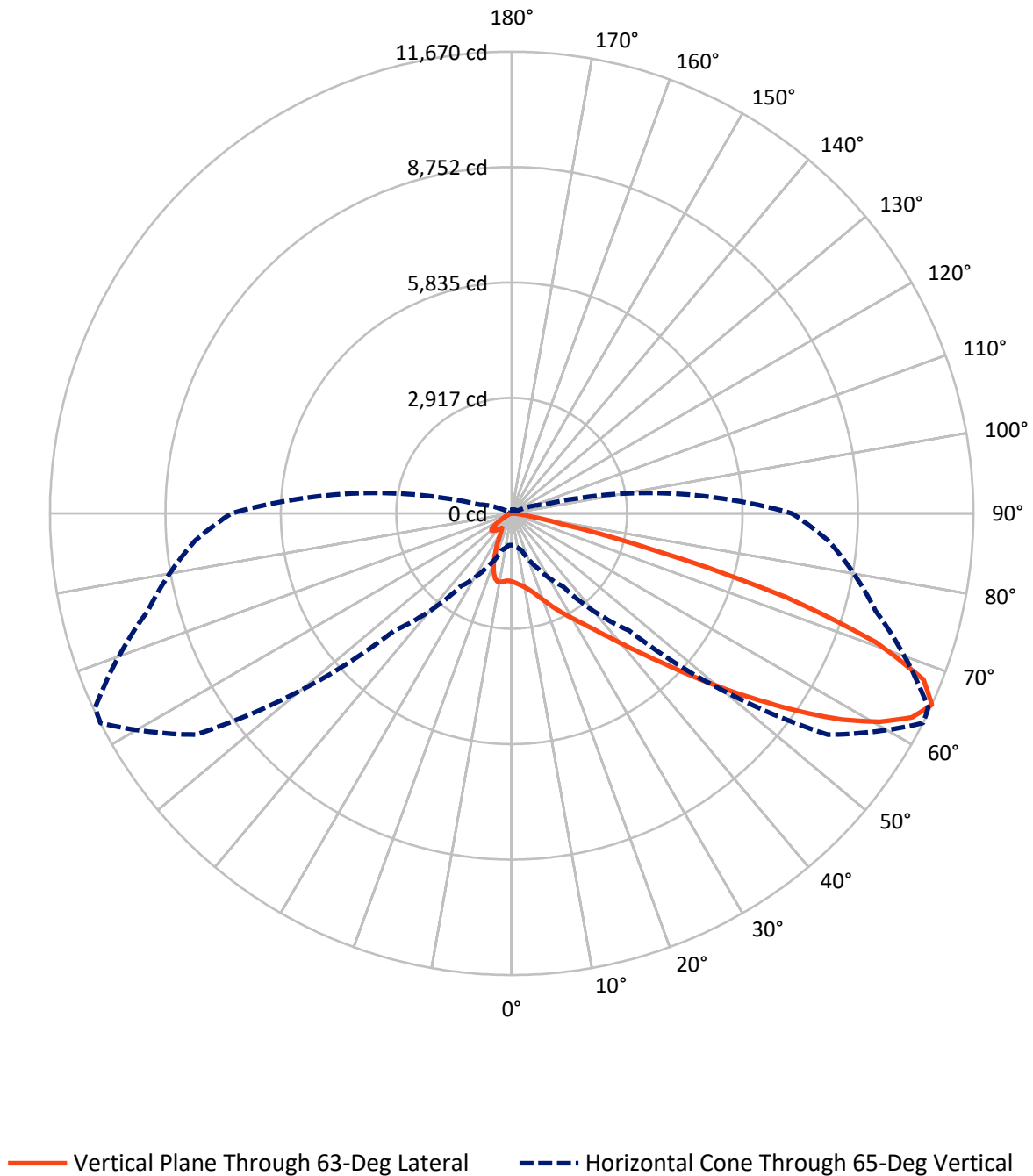
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 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	2058.3	0.0	2058.3
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	11944.3	0.0	11944.3
	% Fixture	85.3	0.0	85.3
Total	Lumens	14002.5	0.0	14002.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.8	1.2
10°-20°	451.8	3.2
20°-30°	786.7	5.6
30°-40°	1417.9	10.1
40°-50°	2812.1	20.1
50°-60°	3830.6	27.4
60°-70°	3057.6	21.8
70°-80°	1383.6	9.9
80°-90°	99.4	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°	14002.5	100.0
0°-180°	14002.5	100.0

Coefficient of Utilization



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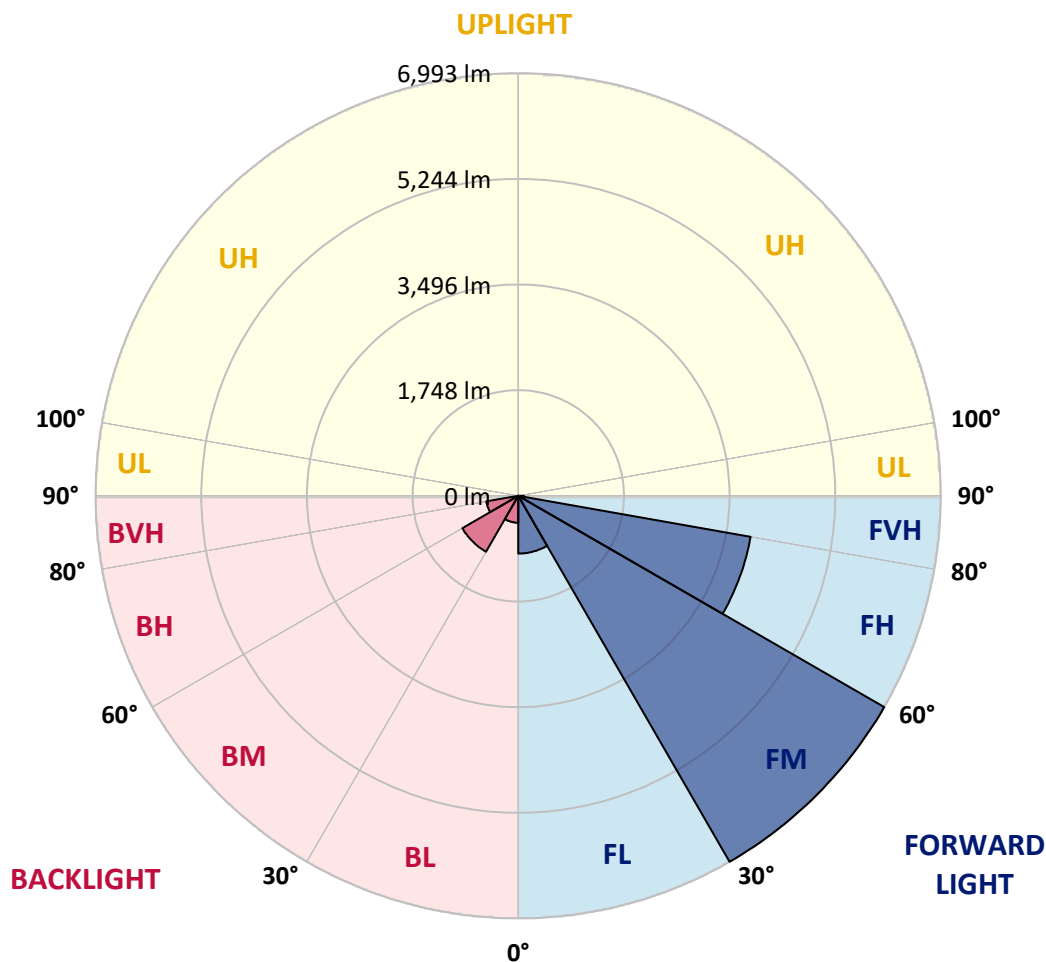
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	955.8	6.8			
FM	(30°-60°)	6992.5	49.9			
FH	(60°-80°)	3903.8	27.9			G2/5000
FVH	(80°-90°)	92.1	0.7			G1/100
BL	(0°-30°)	445.4	3.2	B1/500		
BM	(30°-60°)	1068.1	7.6	B2/2500		
BH	(60°-80°)	537.3	3.8	B2/1000		G2/1000
BVH	(80°-90°)	7.4	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°	1728.2	1728.2	1728.2	1728.2	1728.2	1728.2	1728.2	1728.2	1728.2	1728.2	1728.2
2.5°	1768.6	1763.8	1770.6	1767.7	1765.8	1761.9	1759.9	1758.1	1754.2	1751.3	1739.7
5°	1773.5	1770.6	1777.4	1783.1	1788.8	1794.7	1797.5	1801.4	1797.5	1789.9	1778.3
7.5°	1733.0	1731.0	1745.5	1762.9	1788.8	1811.0	1835.1	1848.6	1849.5	1846.6	1834.1
10°	1730.1	1725.3	1739.7	1761.0	1794.7	1834.1	1876.6	1905.5	1909.3	1921.8	1908.3
12.5°	1775.4	1770.6	1790.8	1813.9	1848.6	1890.0	1942.1	1982.5	1988.3	2005.6	1996.0
15°	1851.5	1844.7	1867.9	1897.7	1942.1	1989.2	2044.2	2080.8	2085.6	2106.8	2089.5
17.5°	1940.1	1933.4	1960.3	1992.1	2040.3	2104.8	2168.4	2208.9	2214.6	2228.1	2196.4
20°	2053.8	2045.1	2066.3	2095.2	2146.2	2223.3	2299.4	2357.2	2356.3	2356.3	2304.2
22.5°	2185.7	2172.3	2190.5	2213.7	2261.9	2355.2	2456.4	2524.9	2524.9	2497.8	2412.1
25°	2327.4	2313.8	2334.1	2355.2	2397.7	2503.7	2622.2	2706.9	2710.7	2664.5	2527.8
27.5°	2504.6	2487.3	2502.6	2527.8	2552.8	2660.7	2801.3	2899.5	2901.5	2830.2	2637.5
30°	2845.6	2796.5	2748.3	2721.4	2733.0	2839.9	2990.1	3099.0	3108.6	3010.3	2756.9
32.5°	3469.8	3460.2	3290.7	3069.1	2953.5	3032.5	3201.1	3332.1	3337.9	3211.6	2912.1
35°	4439.9	4428.3	4155.8	3733.8	3357.2	3290.7	3457.3	3612.4	3608.5	3465.9	3113.4
37.5°	5597.8	5587.2	5227.9	4663.3	4053.6	3680.8	3787.7	3950.6	3974.6	3787.7	3373.5
40°	6587.1	6547.6	6320.3	5776.0	4978.4	4328.2	4257.8	4365.7	4390.8	4169.2	3703.9
42.5°	7336.5	7302.8	7187.2	6847.2	6097.7	5285.7	4811.8	4853.2	4881.0	4615.2	4083.5
45°	7724.8	7717.0	7763.4	7731.5	7238.3	6460.9	5603.6	5431.2	5441.7	5109.4	4514.1
47.5°	7779.6	7775.9	7986.8	8285.4	8219.0	7786.4	6619.9	6151.6	6114.1	5667.1	4982.2
50°	7456.1	7448.3	7852.9	8412.6	8874.0	8900.0	7773.9	6963.7	6880.9	6244.2	5470.6
52.5°	6422.3	6420.5	7085.1	8016.6	9104.3	9874.8	8914.4	7855.8	7717.0	6854.9	5986.9
55°	4941.7	4977.4	5739.4	6840.4	8684.2	10344.0	9938.5	8846.1	8633.2	7469.5	6462.8
57.5°	3500.7	3552.6	4306.0	5286.6	7381.8	10066.6	10631.1	9838.3	9609.0	8082.1	6945.5
60°	1880.4	1926.6	2680.9	3851.3	5491.8	9032.0	10996.2	10699.5	10482.8	8664.0	7380.9
62.5°	1120.3	1135.7	1447.8	2486.3	3714.5	6900.2	10841.1	11355.5	11177.3	9152.4	7759.5
65°	804.3	807.3	964.3	1518.1	2255.1	4192.4	9753.5	11669.5	11614.6	9520.4	8039.8
67.5°	677.2	675.3	740.8	1008.6	1536.5	2100.0	7475.3	11225.4	11458.6	9753.5	8198.8
70°	580.9	583.7	660.8	738.8	1155.0	1188.7	3716.4	9773.7	10270.8	9815.2	8189.1
72.5°	432.6	442.2	513.4	673.3	871.8	817.8	1283.1	7247.0	8145.8	9247.8	7764.3
75°	305.3	310.2	361.2	566.4	650.3	595.3	655.1	3746.3	4898.5	7089.9	6355.0
77.5°	235.0	243.7	273.6	396.0	640.6	418.1	400.8	1296.6	1992.1	4282.9	4357.1
80°	127.2	142.6	197.5	286.1	449.9	295.7	198.4	516.3	675.3	2002.7	1680.0
82.5°	65.5	73.2	137.8	206.1	256.2	258.2	98.3	214.8	278.4	618.5	230.2
85°	26.0	31.8	92.5	113.7	132.0	127.2	44.3	86.7	100.1	171.5	70.3
87.5°	5.7	9.6	33.7	26.0	25.0	27.0	10.6	20.2	19.3	20.2	12.5
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°	1728.2	1728.2	1728.2	1728.2	1728.2	1728.2	1728.2	1728.2	1728.2	1728.2	1728.2
2.5°	1738.8	1734.9	1724.4	1712.8	1699.2	1691.6	1686.7	1685.8	1679.1	1674.2	1679.1
5°	1767.7	1763.8	1743.6	1719.5	1693.5	1673.3	1654.0	1636.6	1611.6	1606.8	1604.8
7.5°	1825.4	1814.9	1782.2	1749.4	1700.3	1641.4	1570.2	1488.3	1415.1	1393.0	1382.3
10°	1896.8	1882.3	1840.9	1783.1	1674.2	1514.3	1341.9	1182.0	1054.8	1019.2	1005.7
12.5°	1977.6	1965.1	1910.3	1803.3	1565.4	1275.4	1011.5	813.0	689.7	658.9	650.3
15°	2074.0	2055.7	1979.6	1772.5	1370.8	969.1	694.5	577.0	532.7	527.0	521.1
17.5°	2176.1	2146.2	2041.3	1661.7	1108.7	688.8	536.6	502.9	483.6	477.8	474.9
20°	2269.6	2231.0	2077.9	1494.1	828.4	536.6	480.7	458.6	441.2	434.5	430.6
22.5°	2363.0	2308.1	2077.9	1265.8	621.4	475.9	441.2	421.0	400.8	392.1	387.2
25°	2460.3	2387.1	2041.3	1011.5	500.0	436.3	403.6	381.5	364.1	353.5	349.7
27.5°	2554.7	2453.5	1957.4	770.7	445.1	401.7	368.9	347.8	331.4	323.7	323.7
30°	2644.3	2519.0	1839.9	584.8	409.4	368.0	337.1	318.9	302.5	294.8	295.7
32.5°	2765.7	2601.9	1714.7	479.7	378.5	336.2	308.2	290.9	276.4	270.7	270.7
35°	2934.3	2724.2	1606.8	471.1	352.6	310.2	282.3	265.9	251.4	246.6	246.6
37.5°	3173.1	2921.8	1550.0	528.9	331.4	287.1	261.1	243.7	230.2	226.4	225.4
40°	3467.9	3189.5	1580.8	586.6	316.9	266.8	241.8	224.5	212.9	208.1	207.2
42.5°	3817.6	3520.0	1751.3	631.0	307.3	249.5	223.4	204.2	196.5	194.5	194.5
45°	4219.3	3883.1	2012.4	678.1	291.9	233.1	205.2	190.8	184.9	184.0	183.1
47.5°	4675.9	4281.9	2314.9	737.0	276.4	217.7	190.8	181.1	176.3	174.4	174.4
50°	5128.7	4683.6	2625.9	769.7	263.9	203.3	179.2	171.5	167.6	166.7	166.7
52.5°	5602.6	5096.9	2877.4	738.8	253.4	191.7	169.5	163.8	159.9	159.0	159.0
55°	6054.4	5431.2	2920.7	627.1	232.2	180.1	159.0	156.0	151.3	151.3	150.3
57.5°	6443.6	5598.8	2614.5	460.4	210.9	162.8	148.3	145.4	141.7	140.6	139.7
60°	6801.0	5550.6	2018.1	310.2	187.9	145.4	134.9	132.9	129.0	124.2	123.3
62.5°	7002.3	5338.6	1380.5	202.3	164.7	127.2	119.4	118.5	109.8	100.1	98.3
65°	7078.4	4903.3	861.2	147.4	137.8	108.9	103.1	101.2	88.7	78.0	77.1
67.5°	7011.9	4186.5	434.5	116.5	108.9	90.5	84.8	84.8	76.1	66.4	65.5
70°	6746.0	3138.4	183.1	93.5	83.8	69.4	69.4	73.2	64.6	53.9	53.0
72.5°	6169.1	2111.6	97.3	71.2	62.6	49.1	56.8	59.8	51.0	40.5	40.5
75°	4904.2	1287.9	67.4	53.0	39.5	34.6	43.4	45.3	34.6	27.0	26.0
77.5°	3354.2	739.8	45.3	33.7	25.0	20.2	29.8	28.0	18.3	12.5	13.5
80°	1472.9	308.2	26.0	15.4	9.6	7.7	10.6	7.7	5.7	3.9	3.9
82.5°	172.4	72.3	9.6	5.7	3.9	1.9	0.9	0.0	0.0	0.0	0.0
85°	35.7	8.7	4.8	1.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.8	1.9	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)