

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: P962992

Luminaire Tested: **NAV-SB2D-735-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962992
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16359 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 147.6
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

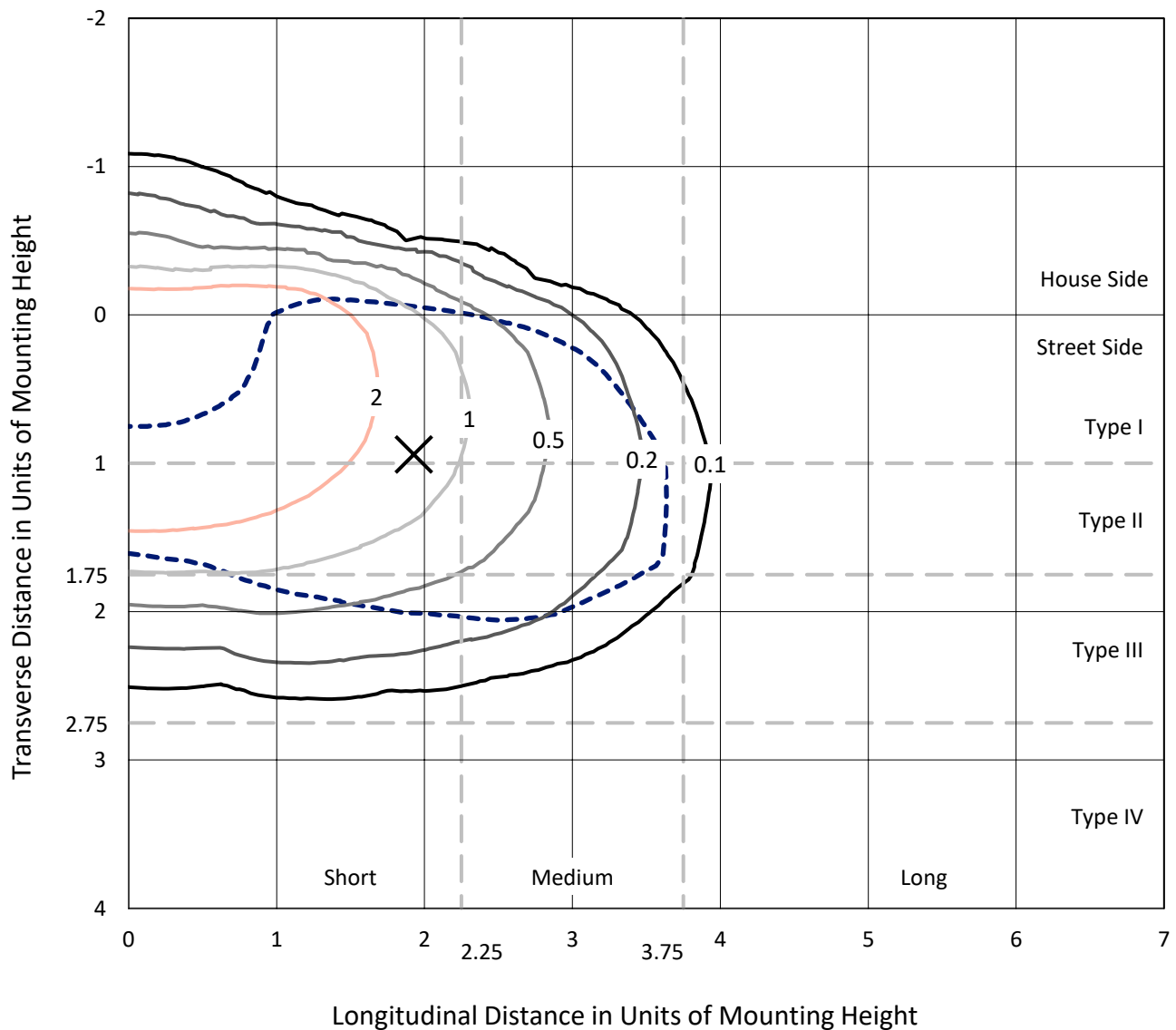


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

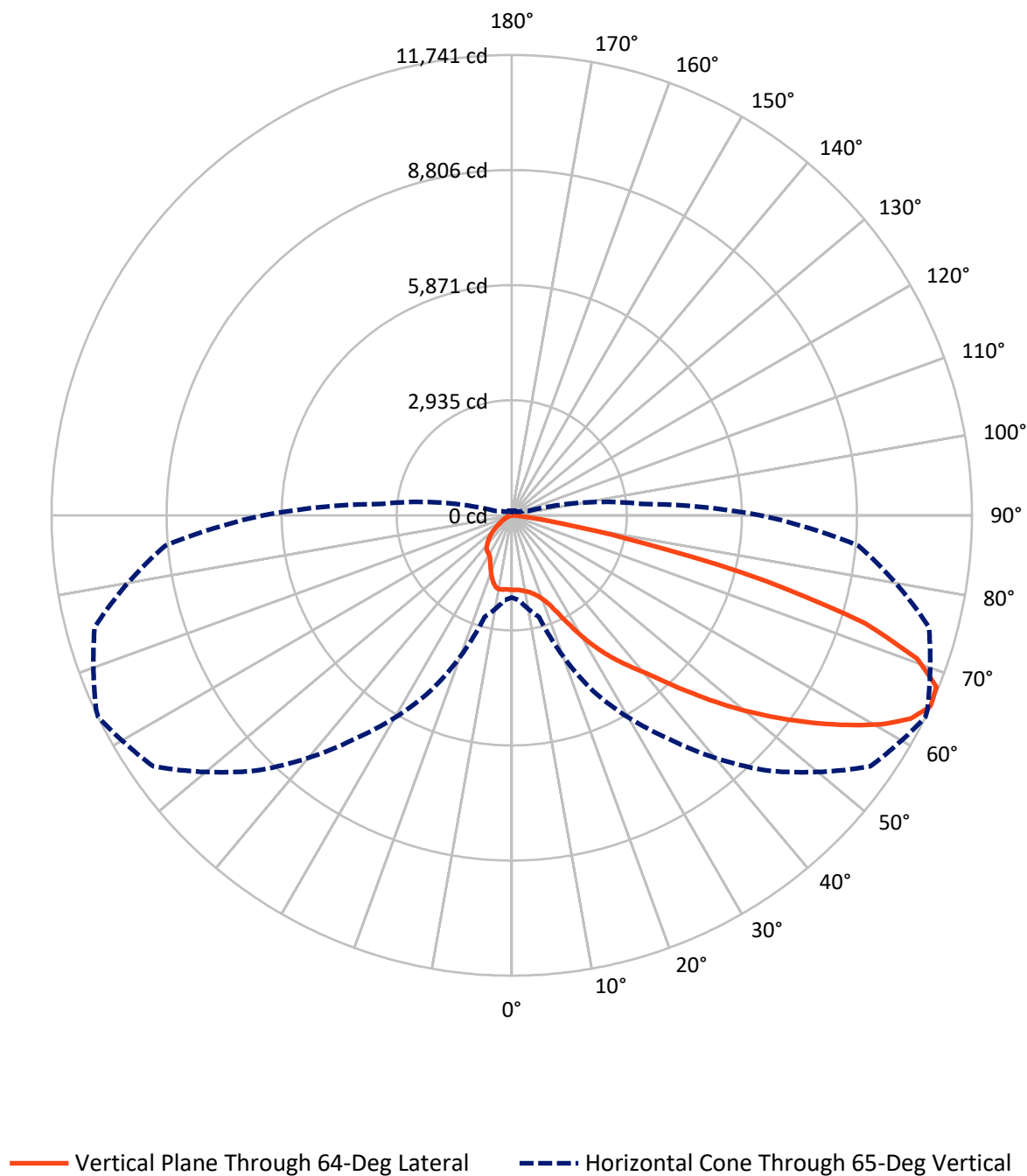


Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2187.7	0.0	2187.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	14171.3	0.0	14171.3
	% Fixture	86.6	0.0	86.6
Total	Lumens	16359.0	0.0	16359.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.5	1.1
10°-20°	476.1	2.9
20°-30°	902.2	5.5
30°-40°	1825.7	11.2
40°-50°	3110.0	19.0
50°-60°	4229.4	25.9
60°-70°	3971.6	24.3
70°-80°	1591.2	9.7
80°-90°	77.1	0.5
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°	16359.0	100.0
0°-180°	16359.0	100.0

Coefficient of Utilization



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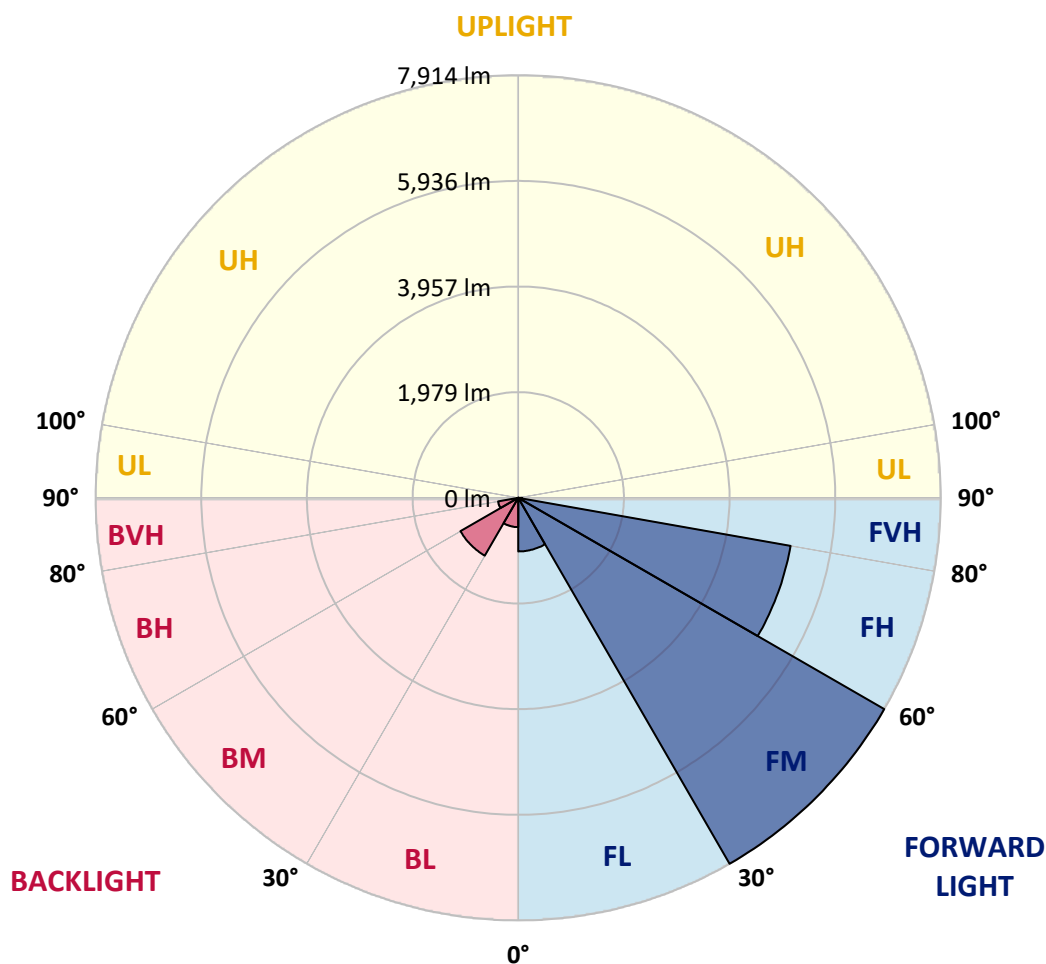
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1004.6	6.1			
FM	(30°-60°)	7914.5	48.4			
FH	(60°-80°)	5178.9	31.7			G3/7500
FVH	(80°-90°)	73.3	0.4			G1/100
BL	(0°-30°)	549.3	3.4	B2/1000		
BM	(30°-60°)	1250.7	7.6	B2/2500		
BH	(60°-80°)	384.0	2.3	B1/500		G1/500
BVH	(80°-90°)	3.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1902.7	1902.7	1902.7	1902.7	1902.7	1902.7	1902.7	1902.7	1902.7	1902.7	1902.7
2.5°	1896.1	1909.3	1906.0	1902.7	1901.6	1903.8	1905.0	1903.8	1903.8	1903.8	1905.0
5°	1860.0	1870.9	1870.9	1878.6	1889.6	1902.7	1912.5	1914.8	1917.0	1920.2	1919.2
7.5°	1790.9	1799.6	1806.3	1831.5	1858.8	1894.0	1923.5	1938.9	1941.1	1953.1	1957.5
10°	1743.7	1754.7	1765.7	1792.0	1831.5	1884.1	1934.5	1971.8	1977.3	2005.8	2018.9
12.5°	1741.5	1752.4	1766.7	1795.3	1841.3	1897.3	1958.7	2012.4	2022.2	2063.9	2091.3
15°	1764.5	1777.7	1790.9	1825.9	1875.3	1943.3	2009.1	2076.0	2085.9	2145.1	2174.7
17.5°	1811.7	1829.2	1839.2	1874.2	1926.9	2002.5	2089.2	2165.9	2174.7	2243.8	2281.0
20°	1905.0	1925.8	1929.0	1957.5	2009.1	2090.3	2193.3	2288.7	2299.7	2378.7	2420.3
22.5°	2098.0	2127.5	2101.2	2115.5	2161.5	2242.7	2354.5	2475.2	2490.5	2580.4	2617.7
25°	2437.9	2479.6	2411.6	2387.4	2407.2	2491.7	2632.0	2784.4	2801.9	2874.4	2893.1
27.5°	3105.7	3052.0	2948.9	2848.1	2788.8	2837.1	2995.0	3183.6	3205.6	3275.8	3253.9
30°	3839.4	3792.3	3653.0	3429.2	3288.9	3281.2	3427.1	3637.6	3662.8	3729.8	3662.8
32.5°	4574.2	4529.3	4377.9	4102.7	3859.2	3738.6	3839.4	4073.0	4086.2	4129.0	4030.3
35°	5296.9	5250.9	5099.5	4817.7	4518.3	4244.1	4224.3	4487.6	4492.0	4537.0	4390.0
37.5°	6024.0	5985.6	5824.5	5548.0	5253.0	4874.7	4691.5	4880.2	4885.7	4929.5	4777.1
40°	6542.8	6559.2	6448.4	6234.6	5981.3	5567.8	5215.7	5298.0	5265.1	5338.6	5247.6
42.5°	6987.9	7020.8	6924.4	6816.9	6670.0	6305.8	5864.9	5850.7	5798.1	5837.6	5743.3
45°	7372.9	7400.3	7313.7	7288.5	7285.2	7029.7	6574.6	6489.0	6415.5	6407.9	6294.8
47.5°	7514.4	7567.1	7604.3	7688.7	7853.2	7745.8	7308.2	7175.5	7093.3	7032.9	6854.2
50°	7568.1	7624.1	7751.3	7996.9	8386.2	8432.3	8038.6	7889.4	7788.6	7678.9	7415.7
52.5°	7495.7	7595.6	7766.6	8180.0	8744.9	8982.8	8739.4	8608.9	8493.7	8314.9	7924.6
55°	7069.1	7169.0	7518.8	8177.9	8923.6	9368.8	9401.7	9343.6	9214.2	8932.4	8335.8
57.5°	6169.9	6317.9	6871.7	7899.3	8920.3	9701.1	10050.9	10092.7	9947.9	9544.3	8659.3
60°	4924.0	5124.7	5800.3	7281.9	8645.1	9881.0	10620.1	10828.5	10675.0	10147.5	8921.4
62.5°	3435.9	3668.4	4307.8	6314.6	8015.6	9751.5	11035.8	11420.8	11304.5	10687.1	9022.3
65°	2095.7	2170.3	2685.7	4969.0	6945.2	9209.8	11164.1	11741.0	11702.5	11017.1	8873.1
67.5°	1396.0	1458.6	1606.6	3407.3	5391.2	8127.4	10857.0	11685.0	11696.0	10963.4	8327.0
70°	841.1	894.9	991.4	1981.6	3494.0	6433.1	9906.2	10972.2	11035.8	10245.1	7291.7
72.5°	346.6	382.7	470.5	898.2	1809.5	4082.9	7888.3	9420.4	9568.5	8614.3	5596.3
75°	196.3	214.9	276.3	450.7	785.3	1902.7	4778.1	6687.5	6905.7	5937.4	3366.8
77.5°	130.5	139.3	178.8	291.7	442.0	649.2	2042.0	3484.1	3900.8	3242.9	1457.4
80°	87.7	95.4	122.8	195.2	287.3	278.6	650.4	1290.8	1587.9	1114.2	355.4
82.5°	59.2	60.3	87.7	128.3	182.0	134.9	191.9	401.4	504.5	322.5	134.9
85°	34.0	32.9	64.7	74.6	81.2	56.0	58.1	120.6	158.0	136.0	76.8
87.5°	4.4	6.6	25.2	19.8	11.0	12.1	12.1	20.8	30.7	32.9	16.4
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°	1902.7	1902.7	1902.7	1902.7	1902.7	1902.7	1902.7	1902.7	1902.7	1902.7	1902.7
2.5°	1905.0	1903.8	1900.6	1897.3	1889.6	1885.2	1887.3	1885.2	1884.1	1885.2	1889.6
5°	1919.2	1915.9	1907.1	1896.1	1880.8	1862.1	1850.1	1832.5	1816.1	1806.3	1808.4
7.5°	1957.5	1954.3	1942.2	1911.5	1862.1	1784.3	1713.0	1650.5	1603.3	1575.9	1577.0
10°	2018.9	2013.5	1994.9	1926.9	1797.4	1627.5	1485.9	1368.7	1291.9	1255.7	1252.4
12.5°	2091.3	2084.7	2051.8	1912.5	1674.6	1409.2	1214.0	1083.5	1012.2	980.4	977.1
15°	2176.9	2168.1	2103.4	1844.6	1495.9	1168.0	989.2	891.5	845.5	817.0	818.2
17.5°	2283.3	2267.9	2141.8	1742.6	1301.8	983.7	851.1	777.6	737.0	709.5	707.4
20°	2421.5	2396.2	2172.5	1620.8	1123.0	867.5	757.8	696.4	665.6	641.5	637.1
22.5°	2614.5	2578.3	2209.8	1489.3	996.9	787.4	688.7	643.7	618.5	591.1	586.7
25°	2853.5	2810.8	2255.8	1367.6	910.2	718.3	638.3	601.0	571.3	539.6	536.3
27.5°	3188.1	3111.3	2310.7	1267.7	835.7	659.1	592.2	550.5	516.5	490.3	484.7
30°	3560.8	3434.8	2358.9	1207.4	767.6	604.2	531.9	490.3	458.4	439.7	436.4
32.5°	3914.0	3742.9	2390.7	1181.1	706.2	541.7	466.1	421.1	397.0	391.5	394.8
35°	4247.4	4021.5	2387.4	1155.9	651.4	479.3	401.4	355.4	336.7	340.0	340.0
37.5°	4631.3	4318.7	2364.5	1116.4	606.5	422.2	345.4	304.8	288.4	289.6	293.9
40°	5077.5	4661.9	2350.1	1041.8	557.1	369.6	299.4	266.5	254.4	250.0	249.0
42.5°	5553.6	4994.2	2352.4	957.4	495.7	322.5	267.6	240.2	229.2	225.9	224.8
45°	6031.7	5311.1	2355.7	869.6	431.0	286.2	244.6	221.5	214.9	210.5	210.5
47.5°	6481.3	5580.9	2294.3	775.3	367.4	258.8	225.9	210.5	205.1	199.6	199.6
50°	6900.2	5760.8	2146.1	665.6	316.9	236.9	211.7	200.7	195.2	189.7	189.7
52.5°	7225.9	5789.3	1901.6	552.7	281.9	220.5	202.8	193.0	186.4	180.9	179.9
55°	7370.7	5610.5	1554.0	447.4	254.4	206.1	194.1	184.2	176.6	171.1	169.9
57.5°	7333.5	5234.4	1211.9	359.7	228.1	191.9	183.2	176.6	167.8	159.0	158.0
60°	7150.3	4731.0	913.5	299.4	204.0	176.6	171.1	165.6	153.5	140.3	138.2
62.5°	6833.4	4098.3	651.4	247.8	177.6	159.0	156.8	152.4	134.9	110.8	108.5
65°	6348.6	3329.5	438.7	206.1	152.4	139.3	140.3	132.7	109.7	82.2	80.1
67.5°	5640.2	2434.6	280.7	168.9	127.2	116.2	117.4	113.0	93.2	70.2	66.9
70°	4737.7	1612.1	183.2	128.3	102.0	89.9	96.6	97.6	78.9	57.0	54.8
72.5°	3473.1	951.9	128.3	95.4	74.6	62.5	78.9	81.2	63.7	42.7	40.6
75°	1979.5	451.8	96.6	69.1	46.0	43.9	61.4	61.4	43.9	28.5	26.3
77.5°	831.3	188.6	68.0	45.0	26.3	25.2	41.7	38.3	21.9	13.1	13.1
80°	240.2	84.5	36.2	21.9	11.0	9.8	16.4	12.1	5.4	2.2	2.2
82.5°	94.3	37.3	14.2	8.8	4.4	4.4	2.2	0.0	0.0	0.0	0.0
85°	56.0	15.4	6.6	3.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	14.2	3.3	2.2	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)