

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: P964047

Luminaire Tested: **NAV-SB3B-735-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964047
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-735-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14417.6 lumens
Efficiency: N/A
Efficacy: 132.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G3

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

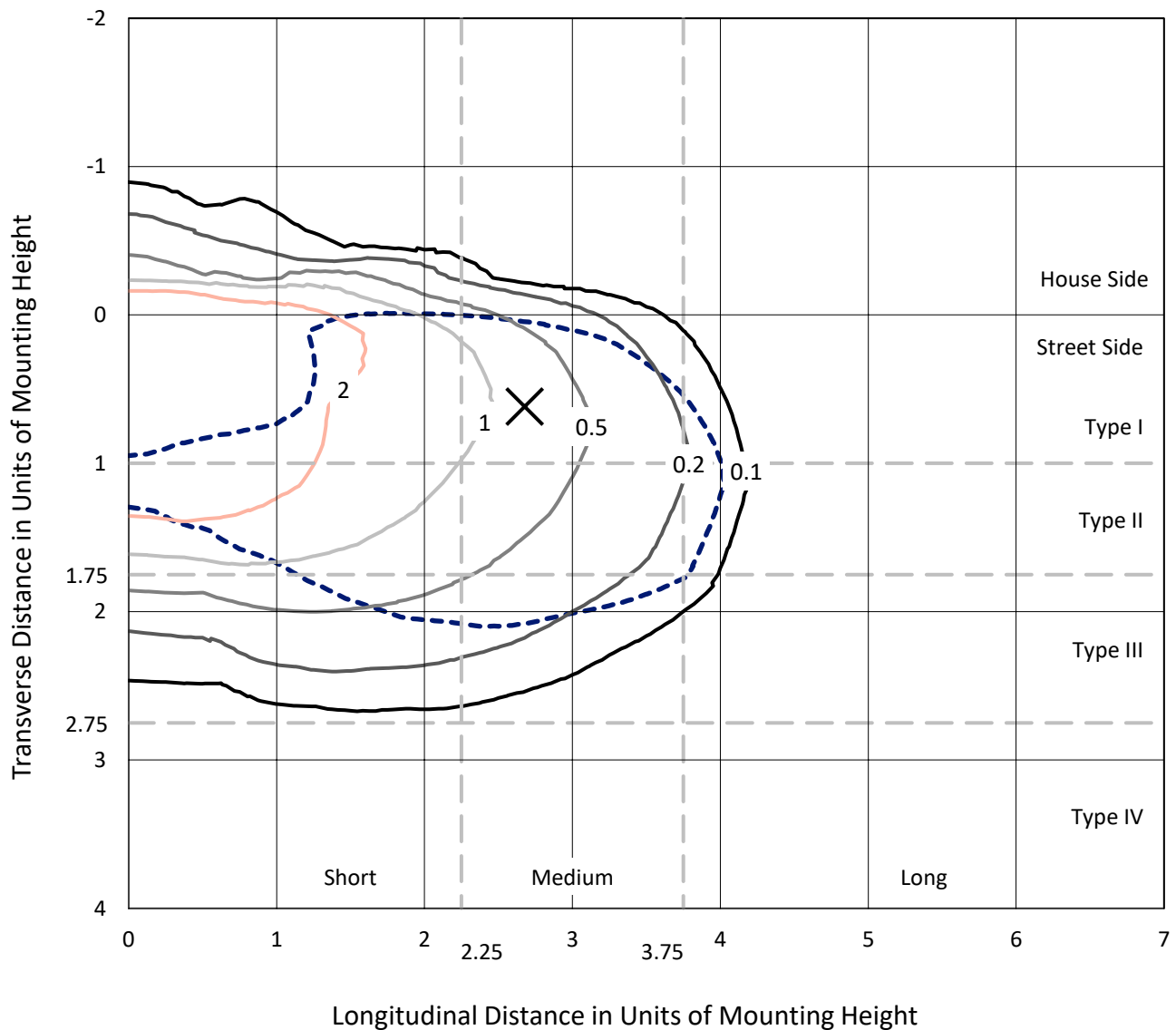


REPORT NUMBER: P964047

CATALOG NUMBER: NAV-SB3B-735-U-T3R-HSS

Iso-Footcandle Lines of Horizontal Illumination

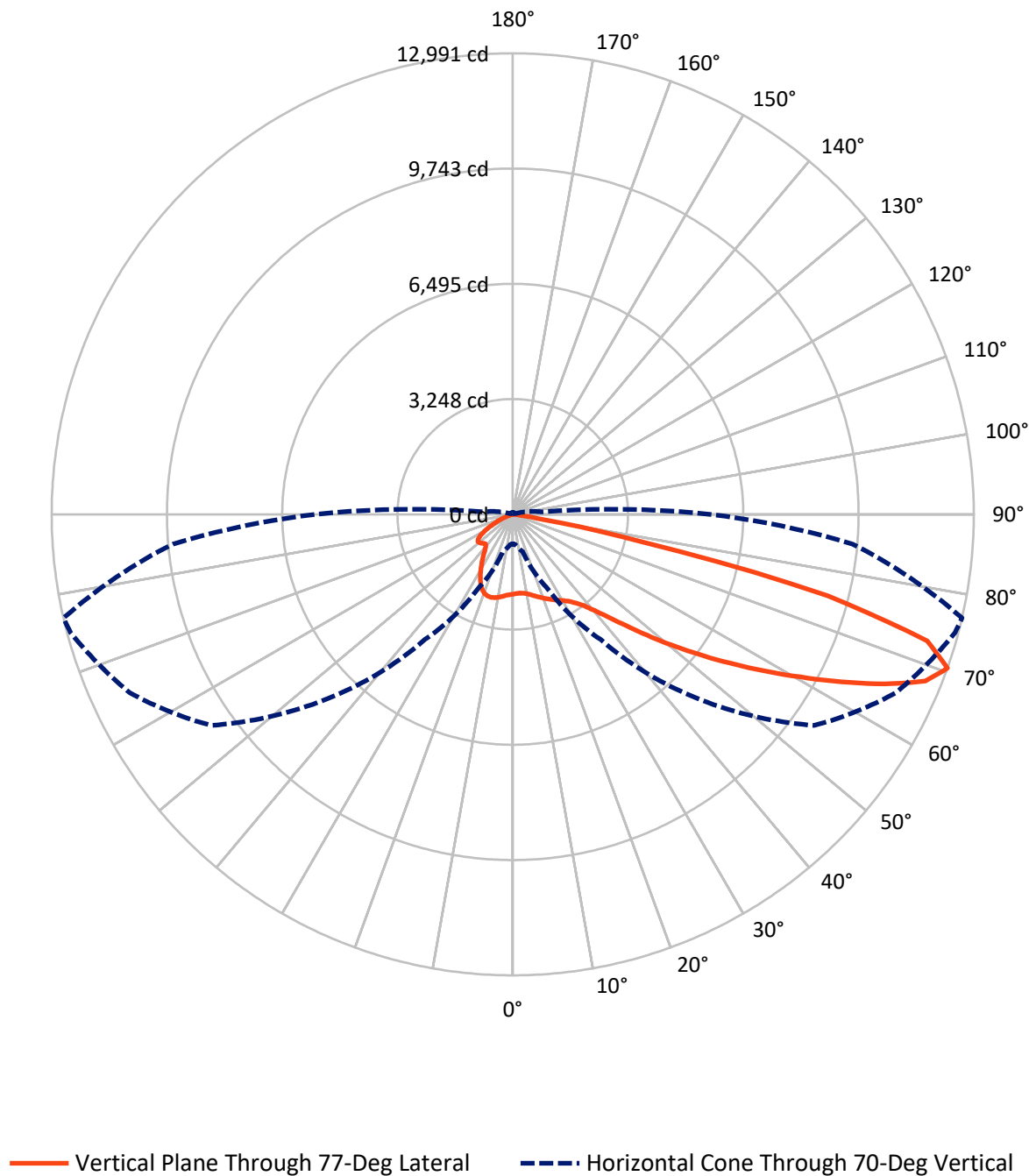
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
Type III - Medium - N/A

REPORT NUMBER: P964047
CATALOG NUMBER: NAV-SB3B-735-U-T3R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P964047

CATALOG NUMBER: NAV-SB3B-735-U-T3R-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1519.8	0.0	1519.8
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	12897.8	0.0	12897.8
	% Fixture	89.5	0.0	89.5
Total	Lumens	14417.6	0.0	14417.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.8	1.3
10°-20°	460.1	3.2
20°-30°	711.7	4.9
30°-40°	1291.3	9.0
40°-50°	2437.6	16.9
50°-60°	3522.0	24.4
60°-70°	3749.1	26.0
70°-80°	1986.8	13.8
80°-90°	65.2	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°	14417.6	100.0
0°-180°	14417.6	100.0

Coefficient of Utilization



REPORT NUMBER: P964047

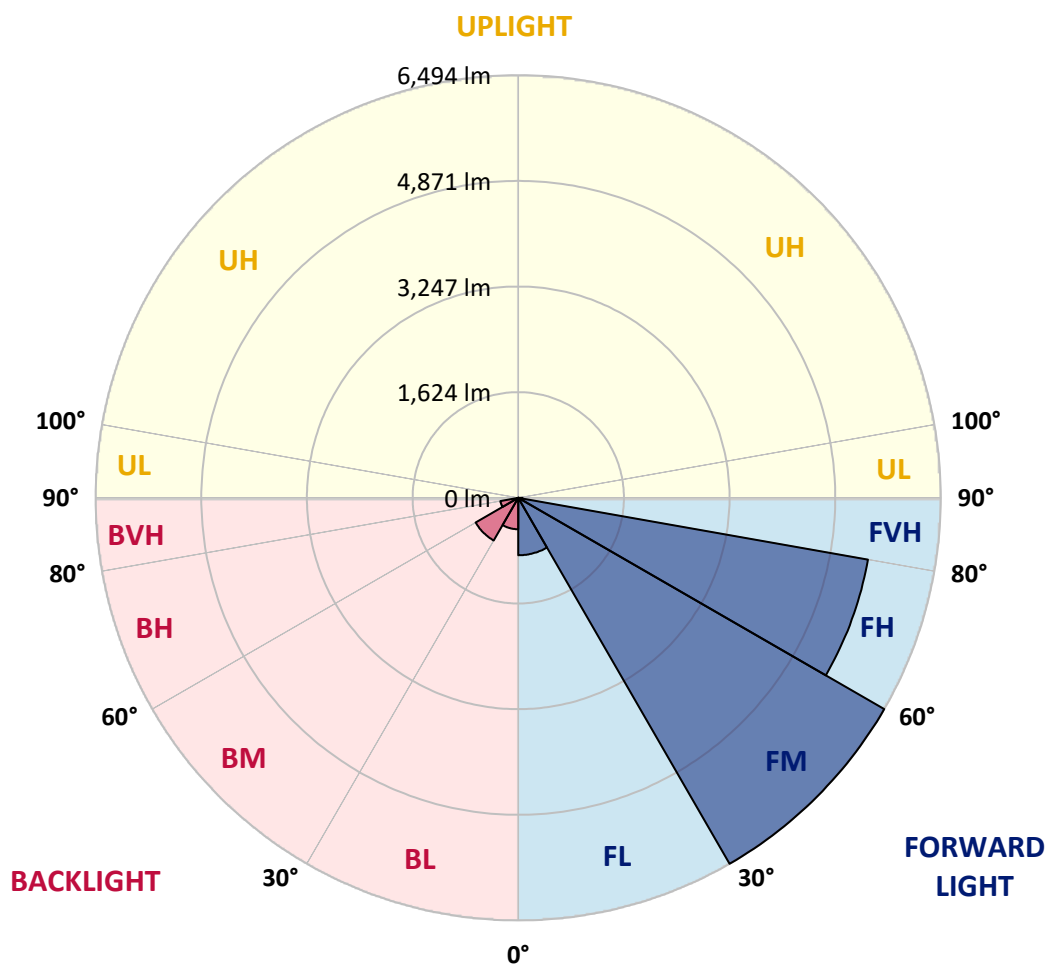
CATALOG NUMBER: NAV-SB3B-735-U-T3R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	882.7	6.1			
FM	(30°-60°)	6494.4	45.0			
FH	(60°-80°)	5457.3	37.9			G3/7500
FVH	(80°-90°)	63.5	0.4			G1/100
BL	(0°-30°)	482.9	3.3	B1/500		
BM	(30°-60°)	756.6	5.2	B1/1000		
BH	(60°-80°)	278.6	1.9	B1/500		G1/500
BVH	(80°-90°)	1.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type III Medium



REPORT NUMBER: P964047

CATALOG NUMBER: NAV-SB3B-735-U-T3R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2248.8	2248.8	2248.8	2248.8	2248.8	2248.8	2248.8	2248.8	2248.8	2248.8	2248.8
2.5°	2111.4	2130.6	2127.8	2140.5	2145.1	2163.3	2181.5	2206.1	2233.4	2232.6	2250.7
5°	1992.1	2011.3	2015.8	2033.1	2054.9	2083.2	2120.5	2169.7	2220.7	2228.9	2265.2
7.5°	1851.0	1871.0	1882.9	1917.5	1957.5	2015.8	2076.9	2148.7	2233.4	2245.3	2315.4
10°	1709.9	1728.0	1743.5	1792.7	1856.5	1943.0	2042.2	2146.0	2259.8	2277.1	2376.4
12.5°	1622.5	1639.8	1657.1	1699.9	1779.1	1884.7	2019.5	2158.8	2303.5	2328.1	2459.2
15°	1591.5	1607.0	1620.6	1658.9	1732.7	1852.8	2014.9	2185.2	2359.0	2391.8	2559.3
17.5°	1596.0	1604.2	1613.4	1642.6	1714.4	1838.2	2023.0	2230.7	2424.6	2453.7	2659.6
20°	1622.5	1627.0	1627.9	1648.0	1711.7	1836.5	2039.4	2274.4	2486.5	2525.7	2758.8
22.5°	1656.2	1658.0	1656.2	1669.8	1729.0	1850.1	2061.4	2327.2	2555.7	2592.1	2858.9
25°	1813.6	1779.1	1735.4	1709.0	1758.2	1876.5	2094.1	2398.2	2631.3	2666.8	2956.3
27.5°	2302.7	2203.3	2046.7	1871.0	1818.2	1914.7	2139.6	2470.1	2707.7	2739.6	3061.1
30°	3096.5	2966.4	2700.5	2304.4	2011.3	1994.9	2198.8	2542.1	2788.8	2823.4	3173.0
32.5°	3892.3	3860.5	3553.6	3005.5	2445.5	2173.3	2297.1	2639.5	2896.2	2923.6	3324.2
35°	4697.2	4632.5	4381.3	3839.5	3114.8	2536.6	2461.0	2767.0	3037.4	3068.3	3544.6
37.5°	5313.6	5274.4	5118.7	4672.6	3908.7	3097.4	2741.5	2964.5	3242.3	3276.8	3826.7
40°	5858.1	5839.8	5787.0	5493.0	4796.4	3831.3	3177.6	3270.5	3526.3	3567.3	4172.8
42.5°	6286.0	6328.8	6358.8	6276.9	5711.5	4669.0	3763.9	3700.2	3922.4	3964.3	4613.4
45°	6723.9	6738.5	6859.6	6977.9	6620.2	5544.8	4424.9	4203.7	4415.0	4466.8	5141.5
47.5°	7005.3	7063.5	7276.6	7485.1	7384.0	6413.4	5135.1	4798.2	4985.8	5083.2	5733.3
50°	7026.2	7136.4	7429.5	7792.9	7940.4	7240.2	5907.2	5475.7	5675.0	5782.4	6365.1
52.5°	6677.5	6848.6	7303.0	7834.7	8240.8	7940.4	6705.8	6153.1	6408.9	6549.1	7020.7
55°	5119.7	5343.6	6826.8	7607.0	8252.6	8471.1	7483.2	6858.7	7226.5	7384.9	7729.1
57.5°	4460.5	4573.3	5367.3	7211.9	8033.2	8685.1	8186.2	7530.6	8116.1	8312.8	8398.3
60°	3711.1	3859.5	4501.4	6565.5	7735.5	8706.0	8807.1	8397.4	9080.3	9301.5	9012.0
62.5°	2522.0	2683.1	3321.4	5454.7	7328.4	8696.0	9316.0	9289.7	10151.9	10389.5	9531.9
65°	1562.4	1663.5	2084.1	4454.0	6759.5	8707.0	9848.7	10373.1	11282.7	11524.0	9934.3
67.5°	1234.6	1281.0	1500.5	3419.8	5778.8	8461.1	10380.4	11392.0	12347.0	12538.3	10057.2
70°	829.4	857.7	1091.6	2292.6	4299.3	7326.7	10370.4	11903.6	12895.2	12990.7	9609.3
72.5°	437.1	458.9	638.3	1061.6	2596.7	5207.9	8741.5	11291.8	12349.8	12205.9	8213.4
75°	218.5	254.9	429.8	539.0	1108.9	2904.4	5428.3	8902.7	9720.3	9163.1	5269.8
77.5°	165.7	200.3	355.1	355.1	386.0	977.8	2299.0	4855.6	4478.6	3729.4	1546.9
80°	105.6	136.5	310.5	268.5	161.1	248.6	599.1	1360.3	951.4	723.9	281.4
82.5°	61.9	89.3	258.6	177.5	90.1	91.9	169.3	289.6	246.7	192.1	86.5
85°	24.6	58.2	177.5	70.1	35.5	22.8	50.9	61.9	50.9	38.2	21.8
87.5°	0.0	13.6	31.0	0.0	2.8	1.8	3.7	4.5	4.5	3.7	7.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P964047

CATALOG NUMBER: NAV-SB3B-735-U-T3R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2248.8	2248.8	2248.8	2248.8	2248.8	2248.8	2248.8	2248.8	2248.8	2248.8	2248.8
2.5°	2258.9	2260.7	2266.2	2267.1	2254.4	2238.0	2231.6	2228.9	2217.9	2217.1	2218.8
5°	2286.3	2294.5	2286.3	2262.6	2206.1	2126.9	2066.8	2017.6	1973.0	1959.4	1951.2
7.5°	2340.9	2349.1	2324.5	2231.6	2089.6	1932.0	1790.1	1689.8	1599.7	1566.0	1552.4
10°	2419.1	2430.1	2352.7	2165.1	1913.9	1660.7	1420.3	1251.0	1119.0	1065.3	1042.5
12.5°	2517.5	2522.0	2368.2	2064.0	1685.3	1323.9	983.3	802.2	684.7	640.9	627.3
15°	2625.8	2619.5	2370.0	1926.6	1373.9	935.9	641.9	527.2	479.8	465.2	465.2
17.5°	2739.6	2713.3	2333.6	1728.0	1032.5	640.1	476.2	448.8	440.6	437.1	436.1
20°	2851.7	2792.4	2267.1	1468.6	741.2	478.0	432.4	424.2	419.7	417.9	416.0
22.5°	2953.6	2852.6	2153.3	1167.3	538.1	422.5	408.8	401.5	393.3	389.7	388.8
25°	3052.9	2887.1	1993.0	885.9	430.7	395.1	384.3	370.5	359.7	355.1	353.3
27.5°	3149.3	2909.0	1792.7	655.6	384.3	369.6	349.6	330.5	322.3	320.5	318.7
30°	3252.2	2916.2	1565.1	488.9	356.0	337.8	308.6	286.8	282.3	283.2	283.2
32.5°	3377.9	2927.2	1335.7	400.6	332.3	299.5	265.0	242.2	238.5	242.2	241.3
35°	3528.2	2949.0	1114.4	368.8	311.4	260.3	223.0	204.0	200.3	203.1	202.1
37.5°	3732.0	2984.6	907.7	362.3	294.1	227.7	187.6	172.1	172.1	173.0	172.1
40°	4003.4	3079.2	722.9	357.8	285.0	203.1	158.5	152.0	154.8	156.6	156.6
42.5°	4333.9	3280.5	598.2	352.4	275.0	192.1	143.8	141.1	145.7	147.5	147.5
45°	4704.4	3535.4	554.5	343.3	265.9	199.4	137.5	133.9	139.3	140.2	141.1
47.5°	5087.8	3784.9	549.0	333.2	256.8	210.3	135.7	127.5	133.9	134.8	135.7
50°	5475.7	3947.9	554.5	317.8	242.2	210.3	136.5	121.1	126.6	129.3	130.2
52.5°	5866.3	4022.5	550.8	284.0	216.7	197.6	136.5	115.6	121.1	122.9	122.9
55°	6245.0	4008.0	495.3	234.0	183.9	174.8	132.9	111.1	114.7	115.6	115.6
57.5°	6544.5	3804.9	392.4	182.1	149.3	145.7	121.1	105.6	108.3	107.4	107.4
60°	6701.1	3358.8	280.4	140.2	117.5	114.7	106.5	98.3	100.1	95.6	94.7
62.5°	6703.0	2768.7	187.6	111.1	93.8	91.0	91.0	88.4	86.5	77.4	74.6
65°	6560.0	2114.2	124.7	88.4	75.5	71.0	76.5	75.5	69.2	56.5	54.6
67.5°	6235.9	1385.8	94.7	69.2	58.2	55.6	61.0	63.8	59.1	47.4	46.4
70°	5569.4	806.7	78.3	53.7	43.7	41.0	49.2	54.6	49.2	38.2	36.4
72.5°	4626.1	435.2	63.8	40.1	30.0	27.3	39.2	44.6	39.2	28.2	27.3
75°	3001.8	233.1	49.2	26.4	15.5	17.3	29.1	32.8	27.3	18.2	16.4
77.5°	1007.9	102.9	31.0	12.7	7.3	7.3	17.3	20.0	12.7	6.4	5.4
80°	224.9	42.7	12.7	5.4	2.8	2.8	3.7	3.7	1.8	0.0	0.0
82.5°	73.8	17.3	5.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	28.2	6.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.0	0.9	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)