

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: P881899

Luminaire Tested: **NAV-SB1C-735-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881899
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-735-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7500 lumens
Efficiency: N/A
Efficacy: 137.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

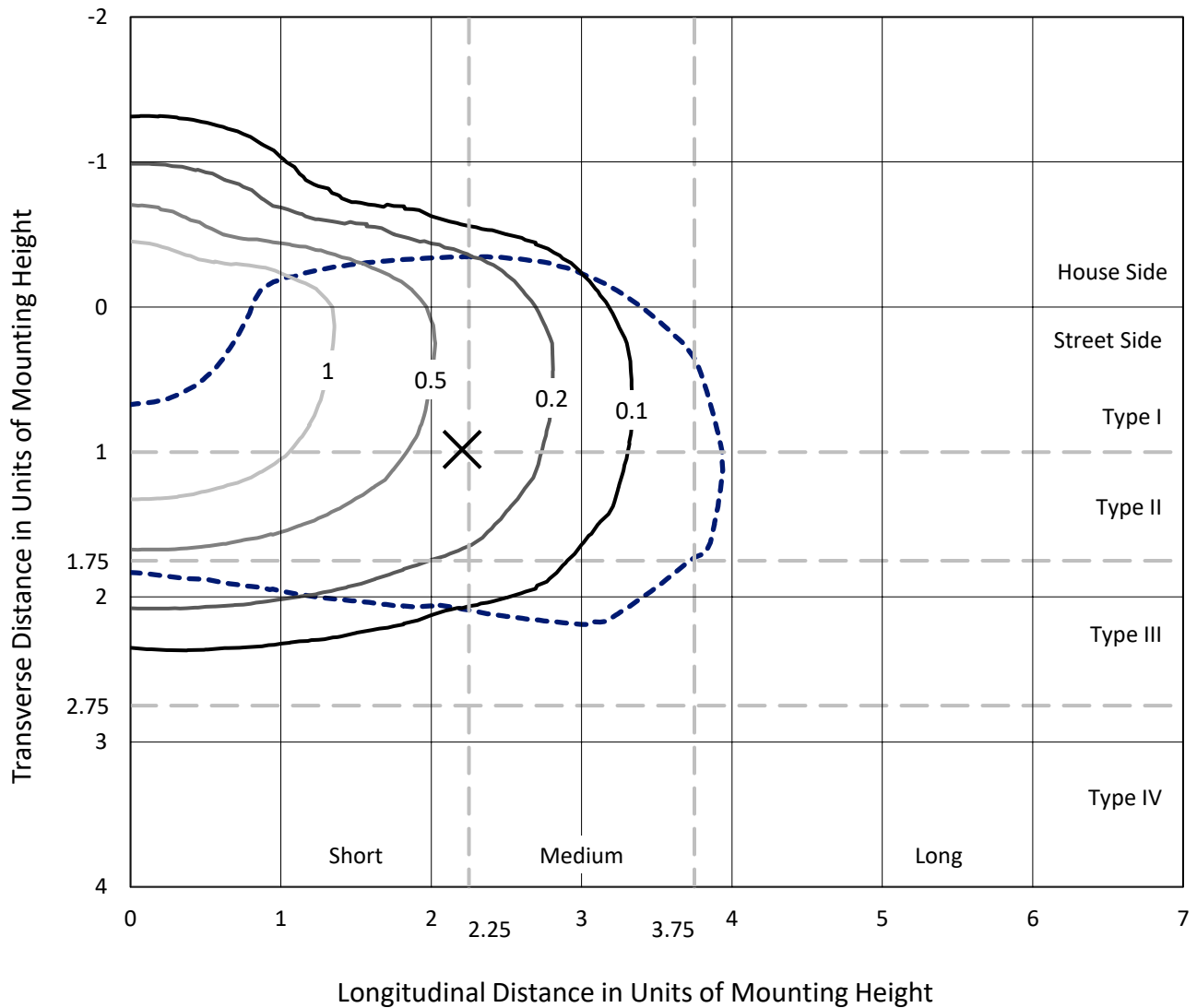
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

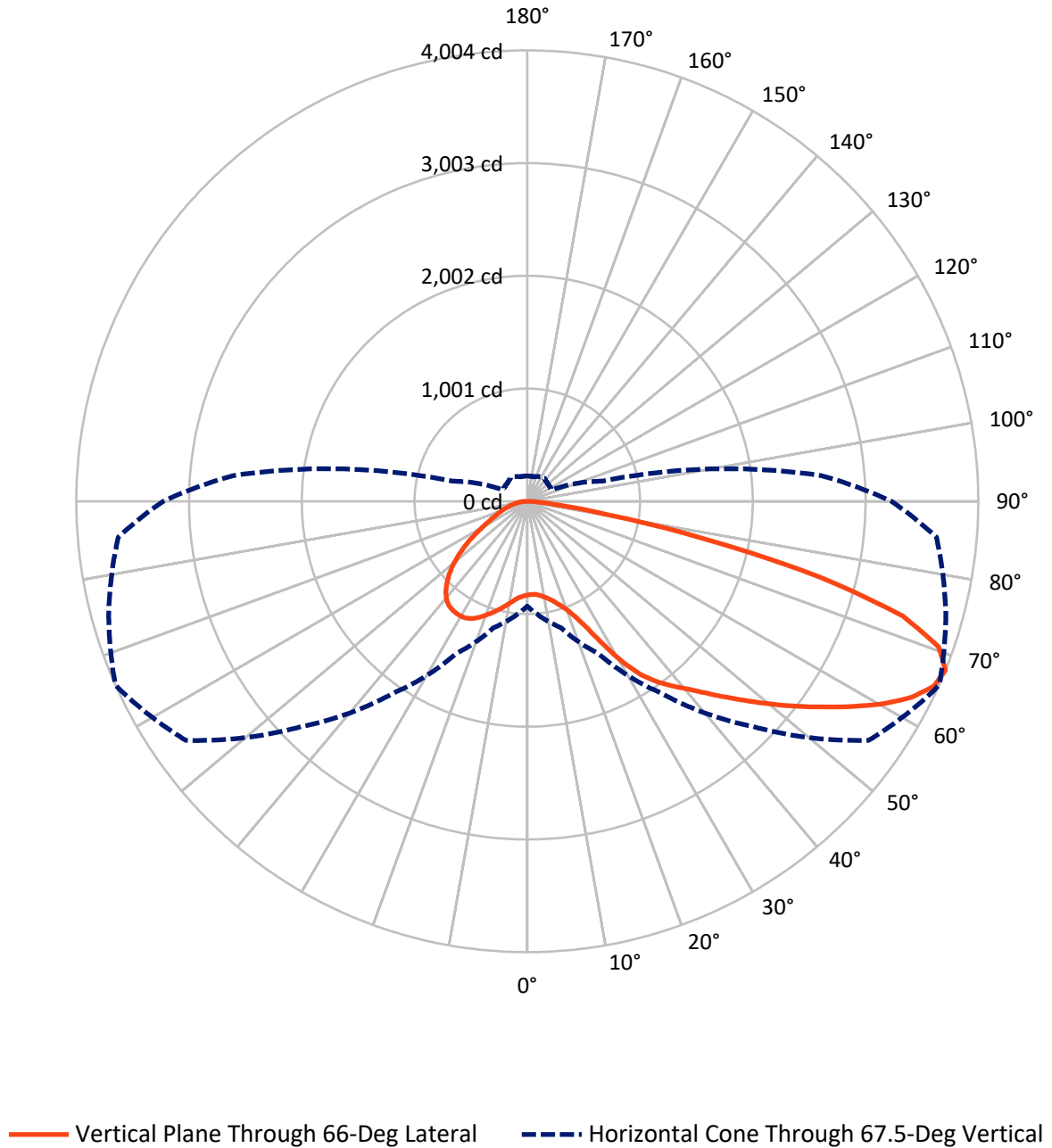
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 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	1864.9	0.0	1864.9
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	5635.1	0.0	5635.1
	% Fixture	75.1	0.0	75.1
Total	Lumens	7500.0	0.0	7500.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.5	1.1
10°-20°	272.5	3.6
20°-30°	525.2	7.0
30°-40°	920.9	12.3
40°-50°	1369.0	18.3
50°-60°	1735.4	23.1
60°-70°	1698.0	22.6
70°-80°	810.0	10.8
80°-90°	86.6	1.2
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°	7500.0	100.0
0°-180°	7500.0	100.0

Coefficient of Utilization



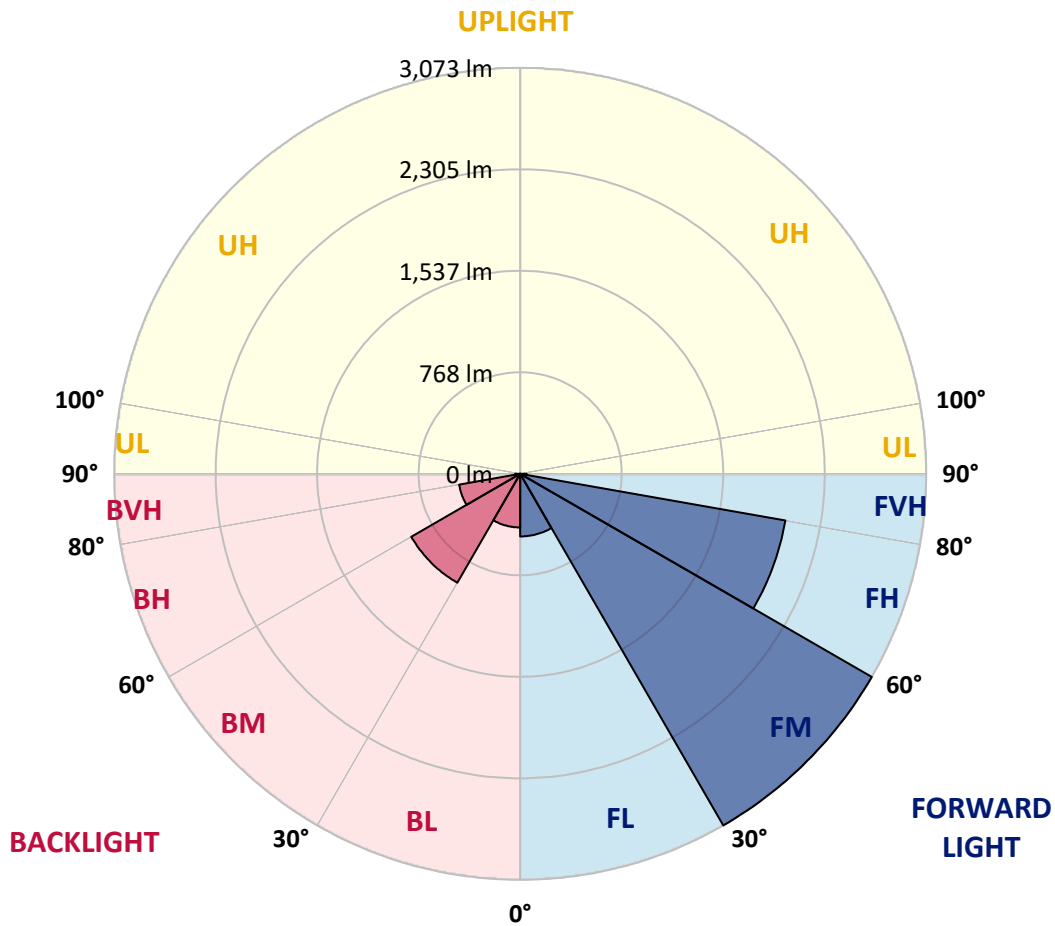
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	473.9	6.3			
FM (30°-60°)	3073.4	41.0			
FH (60°-80°)	2038.7	27.2			G2/5000
FVH (80°-90°)	49.1	0.7			G1/100
BL (0°-30°)	406.2	5.4	B1/500		
BM (30°-60°)	951.8	12.7	B1/1000		
BH (60°-80°)	469.3	6.3	B1/500		G1/500
BVH (80°-90°)	37.5	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8
2.5°	823.2	827.9	826.7	824.8	824.4	825.2	826.3	827.5	827.1	829.1	832.2
5°	820.8	825.5	825.2	825.2	826.7	829.9	831.8	833.8	831.8	834.2	838.5
7.5°	822.4	825.9	827.5	829.1	833.0	838.9	843.7	848.0	845.6	848.4	853.9
10°	842.5	845.2	846.8	846.8	849.6	856.3	861.0	868.9	866.9	871.3	878.3
12.5°	879.1	881.9	881.9	880.3	882.3	886.6	888.2	896.9	893.3	900.4	907.5
15°	924.1	929.6	925.2	922.5	923.3	927.6	927.2	933.9	930.4	936.3	942.6
17.5°	973.7	980.8	973.7	973.3	971.7	976.5	976.9	982.8	976.5	980.8	985.1
20°	1032.4	1042.3	1036.4	1038.3	1034.8	1036.8	1038.7	1047.4	1037.5	1040.7	1039.5
22.5°	1115.2	1127.0	1120.7	1128.2	1125.8	1124.2	1123.8	1139.2	1123.8	1125.0	1113.6
25°	1235.8	1249.9	1238.9	1249.2	1249.2	1254.3	1260.2	1279.9	1254.3	1246.8	1217.2
27.5°	1413.9	1428.1	1406.4	1412.7	1410.7	1423.3	1417.0	1465.9	1438.3	1426.1	1366.6
30°	1628.2	1653.5	1612.5	1610.9	1608.9	1629.0	1638.1	1670.4	1642.4	1630.2	1558.5
32.5°	1859.9	1886.3	1837.5	1823.3	1815.8	1828.0	1820.5	1846.5	1827.2	1808.3	1719.7
35°	2105.0	2131.0	2084.5	2057.0	2027.0	2001.4	1974.6	1981.3	1963.2	1934.4	1842.6
37.5°	2336.7	2384.4	2335.2	2305.6	2250.4	2200.4	2125.5	2094.4	2077.5	2051.1	1958.5
40°	2572.8	2600.0	2562.5	2537.3	2477.4	2399.0	2279.2	2213.4	2190.5	2164.9	2086.5
42.5°	2746.6	2772.6	2752.5	2735.1	2688.2	2597.2	2442.3	2360.0	2326.9	2298.1	2231.5
45°	2884.5	2903.8	2891.2	2897.5	2877.4	2789.1	2611.4	2517.2	2482.9	2447.9	2395.5
47.5°	2940.0	2960.5	2980.6	3018.1	3052.3	2987.3	2793.1	2687.5	2651.2	2615.3	2563.7
50°	2933.7	2954.6	3012.9	3092.5	3198.9	3177.3	2984.6	2868.7	2835.2	2794.2	2746.6
52.5°	2883.3	2906.9	2981.8	3114.2	3283.7	3319.5	3179.6	3055.9	3024.4	2975.5	2927.8
55°	2750.9	2765.1	2877.4	3065.0	3303.8	3418.8	3370.7	3255.3	3223.8	3155.6	3103.6
57.5°	2505.4	2525.9	2689.4	2932.2	3253.3	3486.2	3538.6	3464.9	3434.6	3336.5	3282.1
60°	2185.0	2217.7	2404.9	2709.1	3124.9	3485.8	3691.1	3671.0	3645.8	3514.6	3457.8
62.5°	1822.5	1860.3	2040.4	2393.9	2900.2	3386.9	3786.5	3843.6	3830.6	3678.9	3606.4
65°	1399.7	1425.7	1605.0	1986.0	2550.7	3174.5	3797.5	3961.4	3963.8	3803.8	3684.0
67.5°	931.9	1006.8	1162.5	1490.3	2082.6	2827.3	3700.6	3980.7	4003.6	3846.8	3645.0
70°	454.7	553.3	705.8	968.6	1490.3	2295.0	3447.2	3822.3	3873.2	3721.5	3412.5
72.5°	188.8	220.7	303.8	478.0	855.5	1548.6	2938.1	3392.8	3487.0	3297.4	2869.1
75°	127.3	137.9	173.8	245.1	389.7	763.7	2118.8	2529.8	2681.5	2490.4	2035.7
77.5°	98.1	104.8	126.5	171.4	231.7	288.8	1134.1	1524.6	1603.0	1484.0	1059.2
80°	77.2	82.4	94.6	124.9	164.3	154.5	386.6	690.8	736.1	617.5	340.5
82.5°	67.0	69.0	67.8	84.7	109.2	90.2	126.9	255.0	281.4	204.1	111.1
85°	48.5	54.0	56.3	52.4	57.9	45.7	52.0	90.2	99.3	88.7	62.7
87.5°	19.7	29.2	35.9	33.9	21.3	13.0	16.2	26.4	30.3	33.1	20.5
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°	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8	831.8
2.5°	832.6	835.4	837.4	839.7	841.3	843.7	848.4	851.2	851.6	853.5	853.1
5°	840.1	844.1	848.4	854.7	861.8	867.7	876.8	883.1	885.4	887.4	887.0
7.5°	856.3	861.8	869.7	880.7	891.0	898.8	909.9	917.4	924.8	927.6	928.0
10°	880.3	888.2	899.6	914.6	925.6	935.9	947.3	953.6	961.1	964.3	965.8
12.5°	910.3	918.5	933.5	954.4	964.6	971.7	975.7	974.1	975.7	978.4	979.2
15°	944.5	953.6	970.6	993.0	1000.1	993.8	985.1	977.3	976.1	976.9	979.6
17.5°	985.1	991.8	1011.5	1030.5	1025.3	999.3	980.4	967.8	961.5	959.5	962.3
20°	1041.9	1041.9	1058.0	1069.9	1035.6	991.4	961.9	941.4	928.4	922.9	921.7
22.5°	1110.8	1104.5	1114.8	1106.5	1033.6	969.4	928.4	892.9	873.2	865.3	864.2
25°	1198.3	1190.8	1188.1	1136.8	1019.4	934.3	867.7	824.8	807.4	803.1	803.9
27.5°	1330.3	1311.4	1275.6	1153.4	993.4	879.1	796.8	757.0	747.1	747.5	748.7
30°	1506.1	1468.2	1380.4	1156.2	950.9	801.1	724.3	695.9	691.2	693.1	699.8
32.5°	1668.8	1633.0	1487.6	1143.5	885.4	724.7	659.3	640.3	633.2	635.6	638.8
35°	1796.5	1786.6	1586.9	1125.8	805.1	652.9	600.9	584.8	571.0	567.8	570.2
37.5°	1917.1	1913.1	1661.3	1101.0	725.5	602.1	554.0	532.8	512.7	501.6	502.0
40°	2049.5	2045.5	1710.2	1062.8	654.9	558.0	511.9	483.9	459.1	439.0	440.9
42.5°	2198.4	2175.2	1733.4	1008.0	595.0	520.5	477.6	439.8	407.1	388.5	389.7
45°	2361.2	2308.8	1733.1	938.2	544.6	486.3	440.9	387.4	357.0	339.7	338.9
47.5°	2533.8	2436.4	1711.8	861.0	495.7	448.4	384.2	343.2	323.1	312.5	310.1
50°	2711.9	2555.8	1675.5	772.3	445.7	405.5	348.7	320.8	305.4	295.5	292.0
52.5°	2879.4	2664.2	1631.8	671.9	394.8	363.7	333.0	311.3	295.1	284.1	279.4
55°	3035.0	2757.6	1569.9	569.0	353.5	335.7	325.5	307.4	288.8	275.8	270.7
57.5°	3173.3	2818.3	1463.1	472.5	323.9	316.4	317.6	300.7	279.4	268.4	261.3
60°	3288.4	2862.8	1305.1	383.0	299.9	297.5	305.4	288.1	263.2	250.6	245.1
62.5°	3357.3	2862.0	1111.2	313.7	279.4	280.2	289.2	272.3	247.1	235.3	231.7
65°	3351.4	2791.9	898.4	268.4	259.7	260.5	272.3	255.0	233.7	226.6	226.2
67.5°	3232.8	2620.9	689.2	238.8	238.0	241.6	255.3	243.1	225.4	224.6	225.8
70°	2911.7	2265.8	496.5	215.2	215.5	220.7	238.8	235.6	221.1	222.6	222.2
72.5°	2334.8	1727.5	333.4	190.3	190.7	199.0	223.0	229.7	216.7	237.6	240.8
75°	1554.9	1077.3	214.4	163.9	164.3	175.0	209.2	218.3	204.9	236.8	238.8
77.5°	747.1	484.3	155.3	137.9	137.9	147.8	180.9	195.5	174.6	184.0	168.7
80°	258.1	182.1	122.2	111.1	108.8	115.5	152.5	169.4	150.5	138.7	130.0
82.5°	101.7	94.6	98.1	86.3	78.4	82.8	118.6	139.9	110.7	100.1	99.7
85°	58.3	61.5	69.4	57.1	45.3	50.8	87.1	100.5	83.5	73.7	75.3
87.5°	15.8	21.7	31.9	29.6	20.5	21.7	41.4	55.6	48.1	37.0	38.2
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)