

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: P883299

Luminaire Tested: **NAV-SB3C-827-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883299
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-SB3C-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18264 lumens
Efficiency: N/A
Efficacy: 122.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

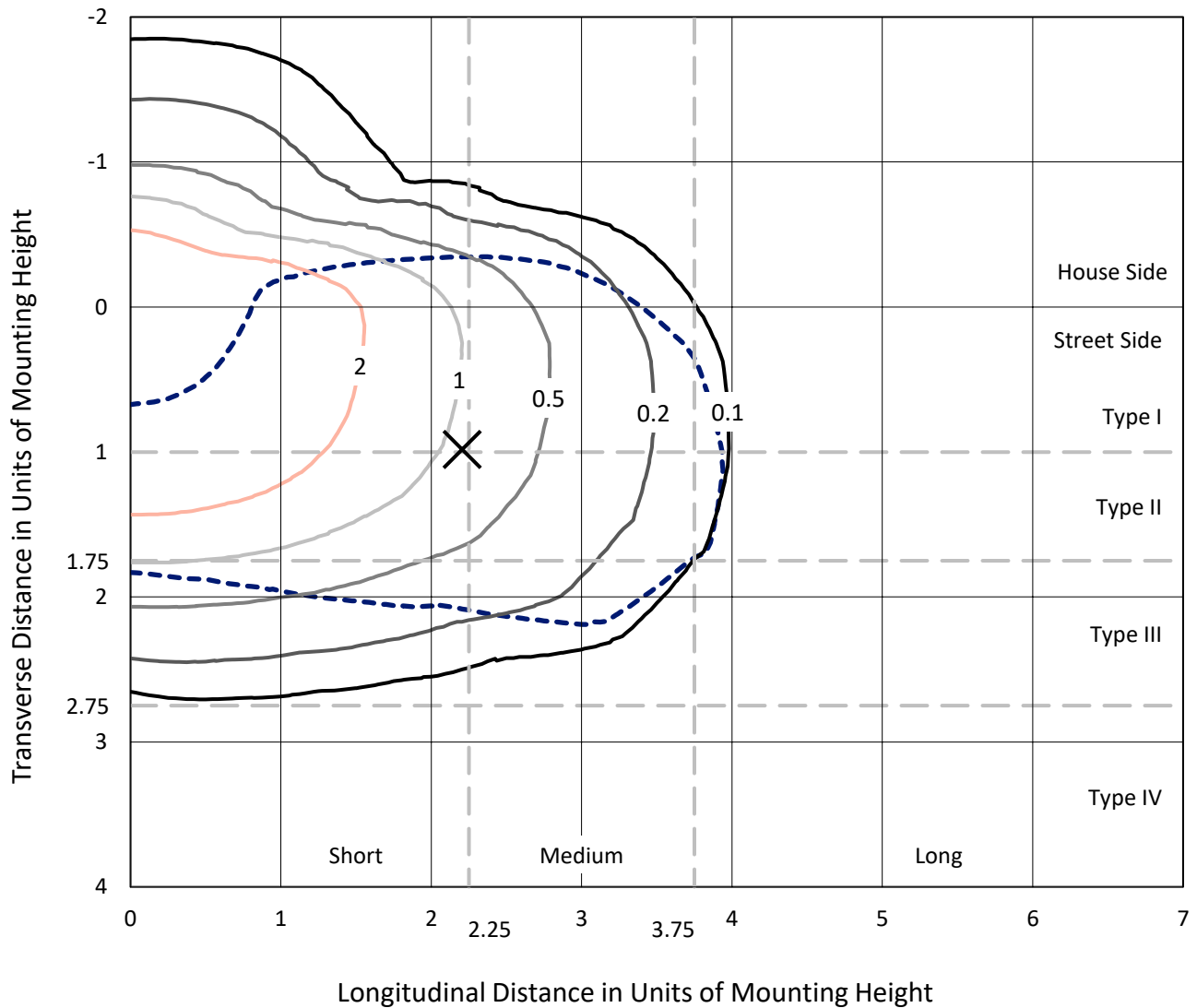
Input Watts (W): 149.1
Input Voltage (V): 120.0
Input Current (Ain): 1.259
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.297
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

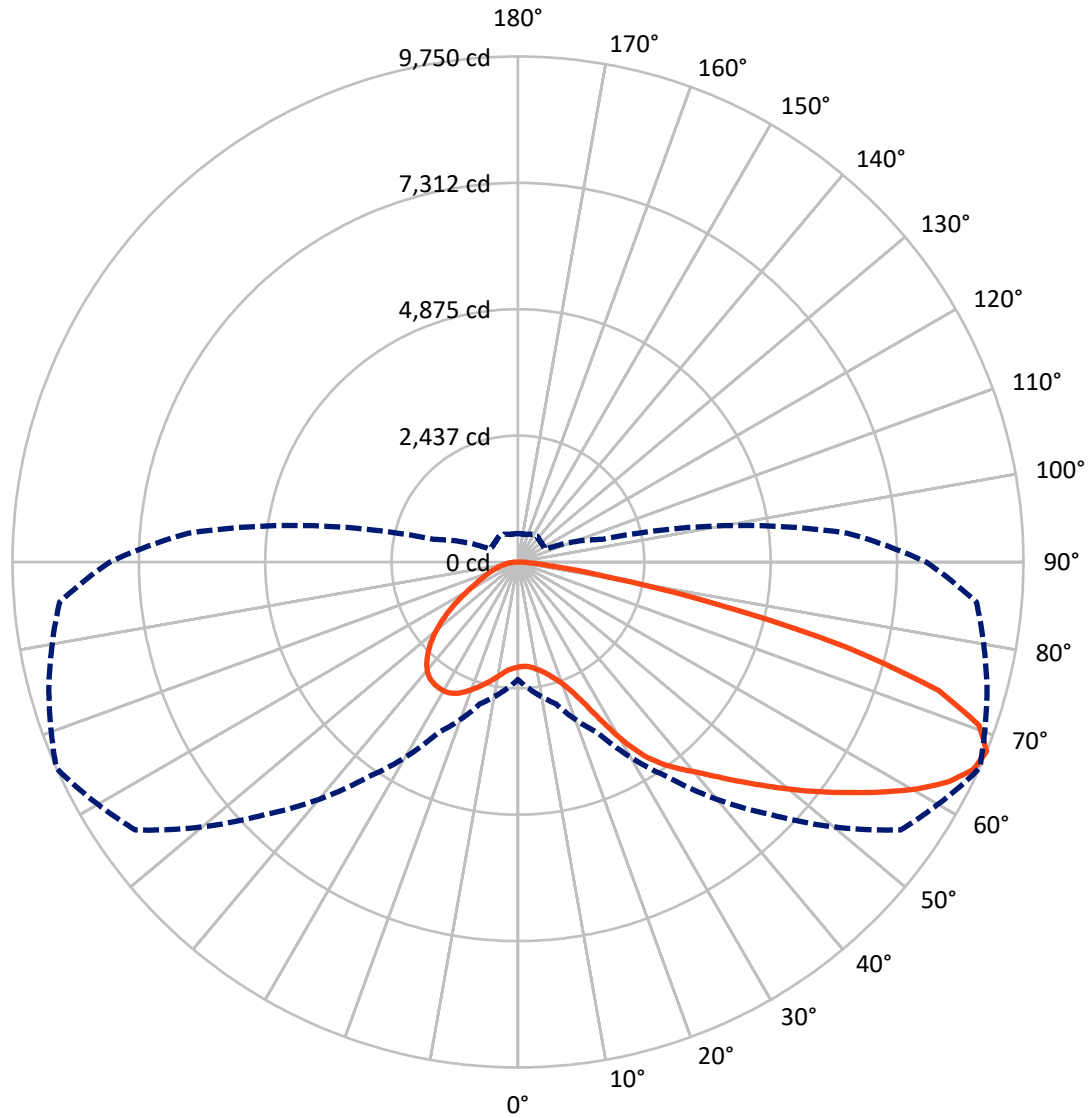
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4541.3	0.0	4541.3
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	13722.7	0.0	13722.7
	% Fixture	75.1	0.0	75.1
Total	Lumens	18264.0	0.0	18264.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.8	1.1
10°-20°	663.6	3.6
20°-30°	1279.0	7.0
30°-40°	2242.5	12.3
40°-50°	3333.9	18.3
50°-60°	4226.0	23.1
60°-70°	4135.0	22.6
70°-80°	1972.5	10.8
80°-90°	210.8	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°	18264.0	100.0
0°-180°	18264.0	100.0



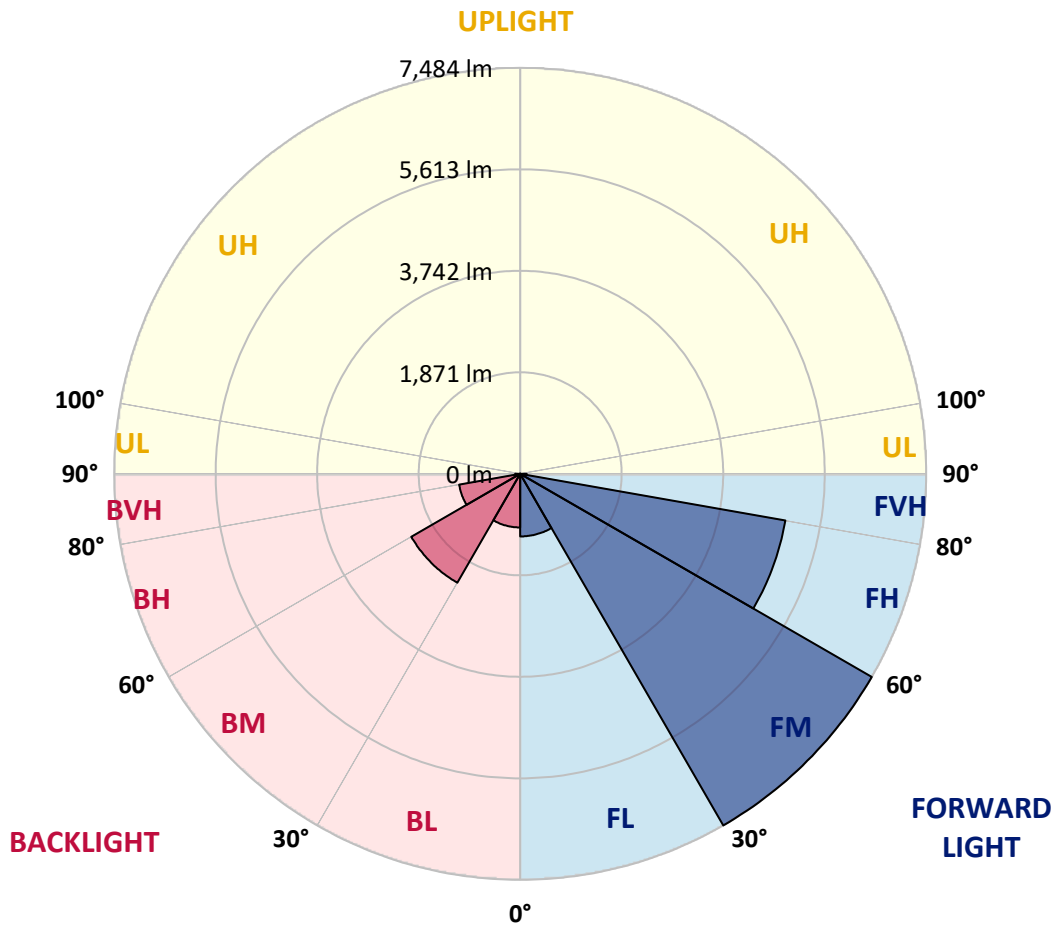
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1154.1	6.3			
FM (30°-60°)	7484.4	41.0			
FH (60°-80°)	4964.7	27.2			G2/5000
FVH (80°-90°)	119.5	0.7			G2/225
BL (0°-30°)	989.3	5.4	B2/1000		
BM (30°-60°)	2317.9	12.7	B2/2500		
BH (60°-80°)	1142.8	6.3	B3/2500		G3/2500
BVH (80°-90°)	91.3	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2025.7	2025.7	2025.7	2025.7	2025.7	2025.7	2025.7	2025.7	2025.7	2025.7	2025.7
2.5°	2004.6	2016.1	2013.2	2008.4	2007.5	2009.4	2012.3	2015.2	2014.2	2019.0	2026.7
5°	1998.9	2010.4	2009.4	2009.4	2013.2	2020.9	2025.7	2030.5	2025.7	2031.5	2042.0
7.5°	2002.7	2011.3	2015.2	2019.0	2028.6	2043.0	2054.5	2065.1	2059.3	2066.0	2079.5
10°	2051.6	2058.3	2062.2	2062.2	2068.9	2085.2	2096.7	2115.9	2111.1	2121.7	2139.0
12.5°	2140.9	2147.6	2147.6	2143.7	2148.5	2159.1	2162.9	2184.1	2175.4	2192.7	2210.0
15°	2250.3	2263.7	2253.1	2246.4	2248.3	2258.9	2257.9	2274.3	2265.6	2280.0	2295.4
17.5°	2371.2	2388.4	2371.2	2370.2	2366.4	2377.9	2378.9	2393.2	2377.9	2388.4	2399.0
20°	2514.2	2538.1	2523.8	2528.6	2519.9	2524.7	2529.5	2550.6	2526.6	2534.3	2531.4
22.5°	2715.7	2744.5	2729.1	2747.3	2741.6	2737.7	2736.8	2774.2	2736.8	2739.7	2711.8
25°	3009.3	3043.9	3017.0	3041.9	3041.9	3054.4	3068.8	3116.8	3054.4	3036.2	2964.2
27.5°	3443.1	3477.6	3424.8	3440.2	3435.4	3466.1	3450.7	3569.7	3502.5	3472.8	3327.9
30°	3965.1	4026.5	3926.7	3922.9	3918.1	3967.0	3989.1	4067.8	3999.6	3969.9	3795.2
32.5°	4529.3	4593.6	4474.6	4440.1	4421.8	4451.6	4433.4	4496.7	4449.7	4403.6	4187.7
35°	5126.2	5189.5	5076.3	5009.1	4936.2	4873.8	4808.6	4824.9	4780.7	4710.7	4487.1
37.5°	5690.4	5806.5	5686.6	5614.6	5480.3	5358.4	5176.1	5100.3	5059.0	4994.7	4769.2
40°	6265.2	6331.5	6240.3	6178.9	6033.0	5842.1	5550.3	5390.1	5334.4	5272.1	5081.1
42.5°	6688.4	6751.8	6702.8	6660.6	6546.4	6324.7	5947.6	5747.1	5666.4	5596.4	5434.2
45°	7024.3	7071.3	7040.6	7056.0	7007.0	6792.1	6359.3	6129.9	6046.4	5961.0	5833.4
47.5°	7159.6	7209.5	7258.4	7349.6	7433.1	7274.7	6801.7	6544.5	6456.2	6368.9	6243.2
50°	7144.2	7195.1	7337.1	7531.0	7790.0	7737.3	7268.0	6985.9	6904.3	6804.5	6688.4
52.5°	7021.4	7079.0	7261.3	7583.7	7996.4	8083.7	7743.0	7441.7	7364.9	7246.0	7129.8
55°	6699.0	6733.5	7007.0	7463.8	8045.3	8325.5	8208.4	7927.3	7850.5	7684.5	7557.8
57.5°	6101.1	6151.0	6549.3	7140.4	7922.5	8489.6	8617.2	8437.8	8363.9	8124.9	7992.5
60°	5321.0	5400.6	5856.4	6597.3	7609.6	8488.6	8988.6	8939.6	8878.2	8558.7	8420.5
62.5°	4438.2	4530.3	4968.8	5829.6	7062.7	8247.8	9220.8	9360.0	9328.3	8958.8	8782.3
65°	3408.5	3471.8	3908.5	4836.4	6211.5	7730.6	9247.7	9646.9	9652.6	9263.0	8971.3
67.5°	2269.5	2451.8	2830.8	3629.2	5071.5	6885.1	9011.6	9693.9	9749.6	9367.6	8876.3
70°	1107.4	1347.3	1718.6	2358.7	3629.2	5588.7	8394.6	9308.1	9431.9	9062.5	8310.1
72.5°	459.6	537.4	739.9	1164.0	2083.3	3771.2	7154.8	8262.2	8491.5	8029.9	6986.9
75°	310.0	335.9	423.2	596.9	949.0	1859.7	5159.8	6160.6	6530.1	6064.7	4957.3
77.5°	238.9	255.3	308.0	417.4	564.2	703.4	2761.7	3712.7	3903.7	3613.9	2579.4
80°	188.1	200.6	230.3	304.2	400.2	376.2	941.4	1682.2	1792.5	1503.7	829.1
82.5°	163.1	167.9	165.1	206.3	265.8	219.7	309.0	620.9	685.2	497.1	270.6
85°	118.0	131.5	137.2	127.6	141.1	111.3	126.7	219.7	241.8	215.9	152.6
87.5°	48.0	71.0	87.3	82.5	51.8	31.7	39.3	64.3	73.9	80.6	49.9
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°	2025.7	2025.7	2025.7	2025.7	2025.7	2025.7	2025.7	2025.7	2025.7	2025.7	2025.7
2.5°	2027.6	2034.4	2039.2	2044.9	2048.7	2054.5	2066.0	2072.7	2073.7	2078.5	2077.5
5°	2045.9	2055.5	2066.0	2081.4	2098.6	2113.0	2135.1	2150.5	2156.2	2161.0	2160.1
7.5°	2085.2	2098.6	2117.8	2144.7	2169.7	2188.9	2215.7	2234.0	2252.2	2258.9	2259.9
10°	2143.7	2162.9	2190.8	2227.2	2254.1	2279.1	2306.9	2322.2	2340.5	2348.1	2352.0
12.5°	2216.7	2236.8	2273.3	2324.2	2349.1	2366.4	2376.0	2372.1	2376.0	2382.7	2384.6
15°	2300.2	2322.2	2363.5	2418.2	2435.5	2420.1	2399.0	2379.8	2376.9	2378.9	2385.6
17.5°	2399.0	2415.3	2463.3	2509.4	2496.9	2433.5	2387.5	2356.8	2341.4	2336.6	2343.3
20°	2537.2	2537.2	2576.5	2605.3	2521.8	2414.4	2342.4	2292.5	2260.8	2247.4	2244.5
22.5°	2705.1	2689.8	2714.7	2694.6	2517.0	2360.6	2260.8	2174.5	2126.5	2107.3	2104.4
25°	2918.1	2899.9	2893.2	2768.5	2482.5	2275.2	2113.0	2008.4	1966.2	1955.7	1957.6
27.5°	3239.6	3193.6	3106.2	2808.8	2419.2	2140.9	1940.3	1843.4	1819.4	1820.4	1823.2
30°	3667.6	3575.5	3361.5	2815.5	2315.5	1950.9	1763.7	1694.7	1683.1	1687.9	1704.3
32.5°	4063.9	3976.6	3622.5	2784.8	2156.2	1764.7	1605.4	1559.4	1542.1	1547.8	1555.5
35°	4374.8	4350.8	3864.3	2741.6	1960.5	1590.1	1463.4	1424.0	1390.5	1382.8	1388.5
37.5°	4668.5	4658.9	4045.7	2681.1	1766.6	1466.3	1349.2	1297.4	1248.4	1221.6	1222.5
40°	4990.9	4981.3	4164.7	2588.0	1594.9	1358.8	1246.5	1178.4	1117.9	1069.0	1073.8
42.5°	5353.6	5297.0	4221.3	2454.7	1449.0	1267.6	1163.0	1070.9	991.3	946.2	949.0
45°	5749.9	5622.3	4220.3	2284.8	1326.2	1184.1	1073.8	943.3	869.4	827.2	825.3
47.5°	6170.2	5933.2	4168.5	2096.7	1207.2	1092.0	935.6	835.8	786.9	761.0	755.2
50°	6604.0	6224.0	4080.2	1880.8	1085.3	987.4	849.2	781.1	743.7	719.7	711.1
52.5°	7011.8	6487.9	3973.7	1636.1	961.5	885.7	810.9	758.1	718.7	691.9	680.4
55°	7390.9	6715.3	3823.1	1385.7	860.8	817.6	792.6	748.5	703.4	671.7	659.2
57.5°	7727.7	6863.1	3563.0	1150.6	788.8	770.6	773.4	732.2	680.4	653.5	636.2
60°	8007.9	6971.5	3178.2	932.7	730.3	724.5	743.7	701.5	641.0	610.3	596.9
62.5°	8175.8	6969.6	2706.1	763.8	680.4	682.3	704.3	663.1	601.7	572.9	564.2
65°	8161.4	6798.8	2187.9	653.5	632.4	634.3	663.1	620.9	569.0	551.8	550.8
67.5°	7872.6	6382.3	1678.3	581.5	579.6	588.2	621.8	592.1	548.9	547.0	549.9
70°	7090.5	5517.7	1209.1	523.9	524.9	537.4	581.5	573.8	538.3	542.2	541.2
72.5°	5685.6	4206.9	811.8	463.5	464.4	484.6	543.1	559.4	527.8	578.6	586.3
75°	3786.6	2623.6	522.0	399.2	400.2	426.1	509.5	531.6	499.0	576.7	581.5
77.5°	1819.4	1179.4	378.1	335.9	335.9	359.9	440.5	476.0	425.1	448.1	410.7
80°	628.5	443.3	297.5	270.6	264.9	281.2	371.4	412.6	366.6	337.8	316.7
82.5°	247.6	230.3	238.9	210.2	191.0	201.5	288.8	340.7	269.6	243.7	242.8
85°	142.0	149.7	168.9	139.1	110.4	123.8	212.1	244.7	203.4	179.4	183.3
87.5°	38.4	52.8	77.7	72.0	49.9	52.8	100.8	135.3	117.1	90.2	93.1
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)