

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: P968169

Luminaire Tested: **NAV-SB5B-722-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968169
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-SB5B-722-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 450mA 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: 18889.7 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

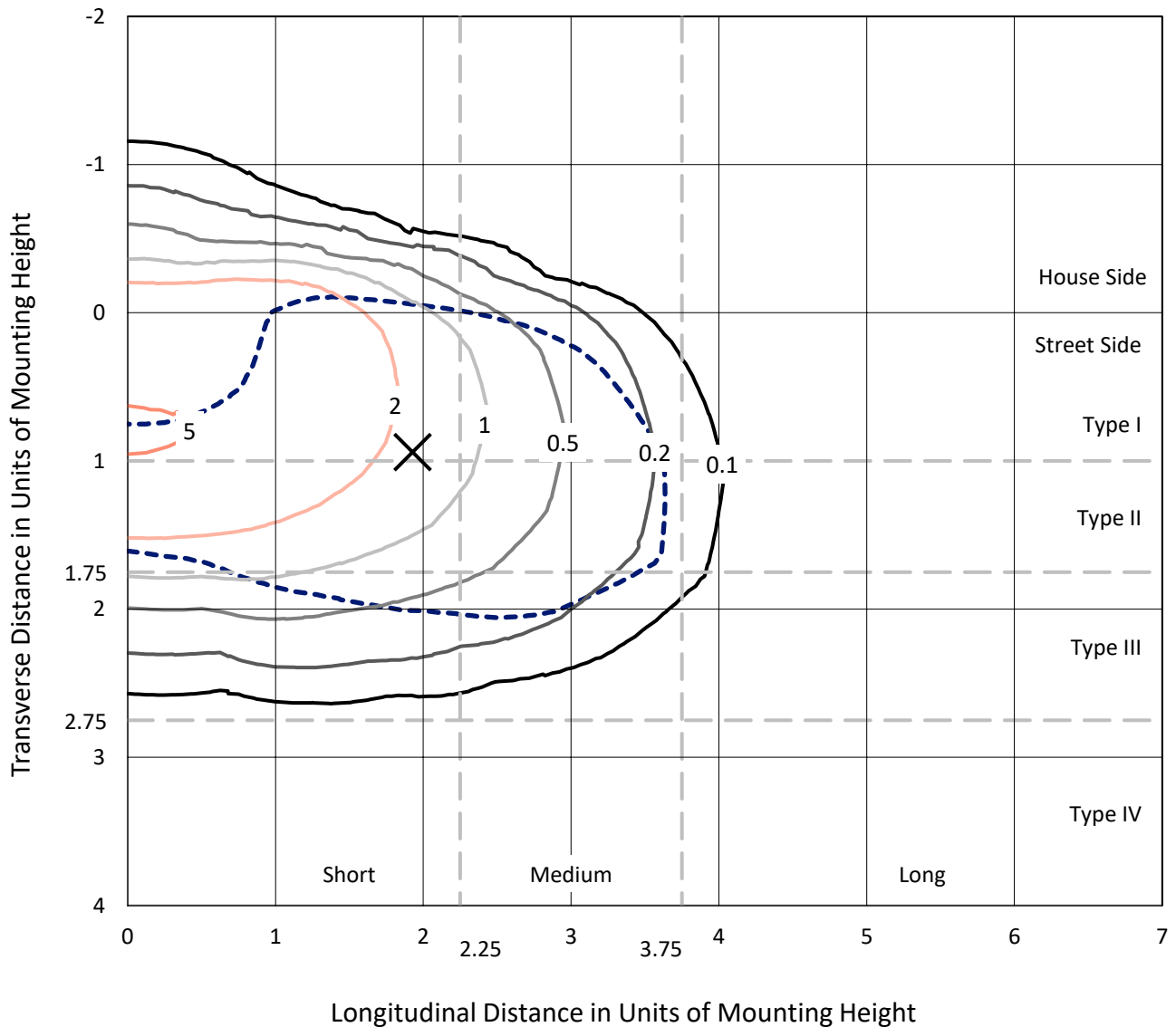
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

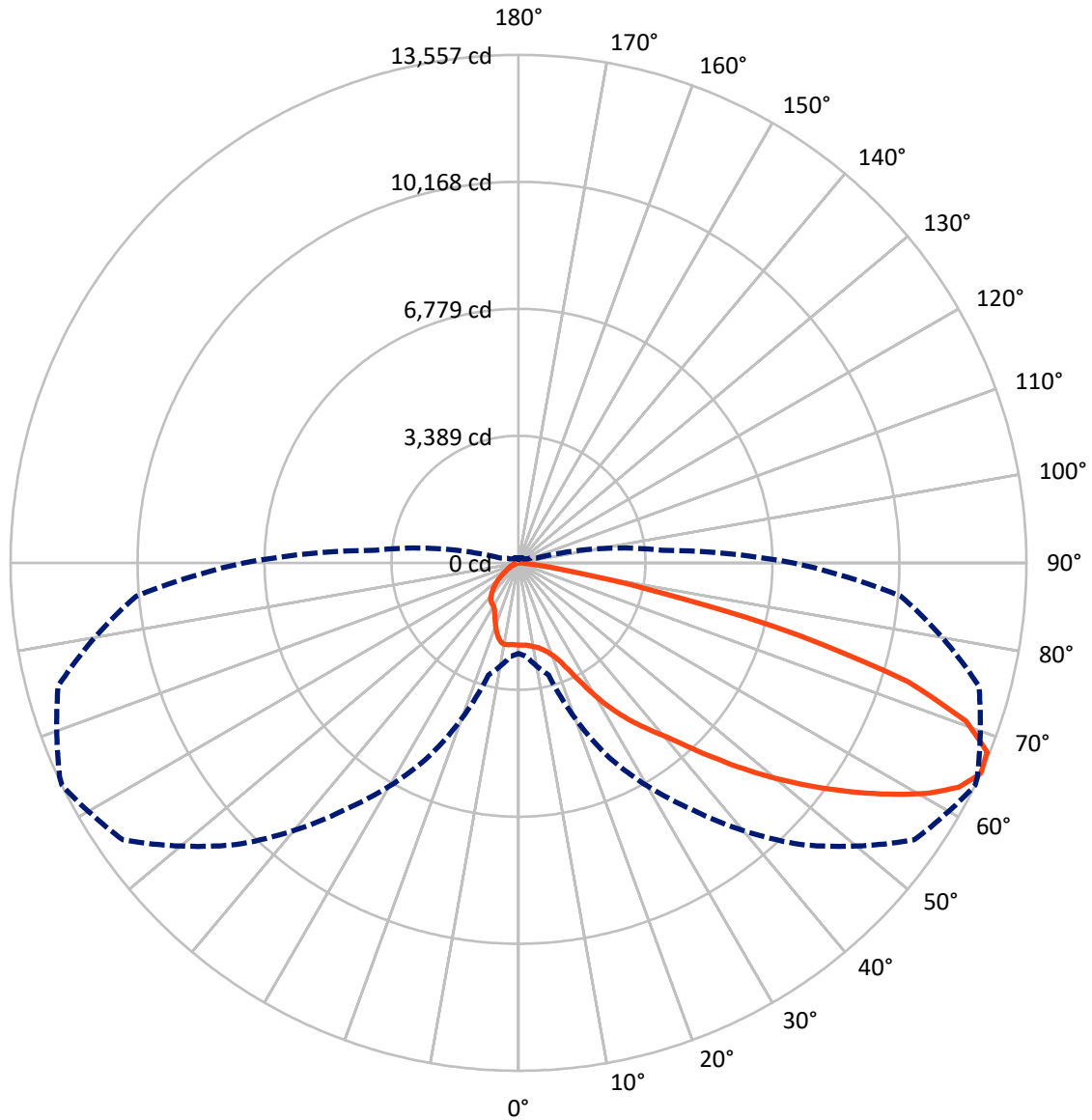
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2526.1	0.0	2526.1
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	16363.6	0.0	16363.6
	% Fixture	86.6	0.0	86.6
Total	Lumens	18889.7	0.0	18889.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.7	1.1
10°-20°	549.8	2.9
20°-30°	1041.8	5.5
30°-40°	2108.1	11.2
40°-50°	3591.2	19.0
50°-60°	4883.7	25.9
60°-70°	4586.1	24.3
70°-80°	1837.4	9.7
80°-90°	89.0	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°	18889.7	100.0
0°-180°	18889.7	100.0

Coefficient of Utilization



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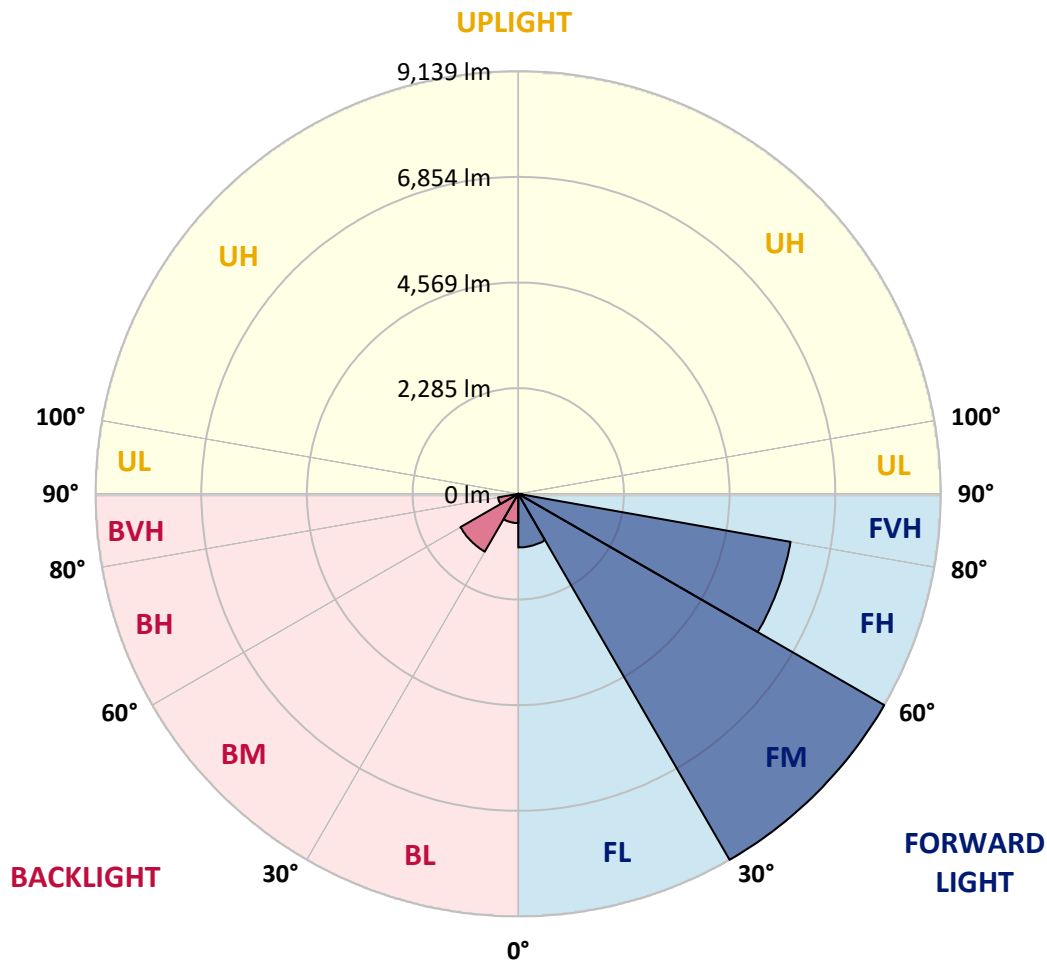
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1160.0	6.1			
FM (30°-60°)	9138.8	48.4			
FH (60°-80°)	5980.1	31.7			G3/7500
FVH (80°-90°)	84.7	0.4			G1/100
BL (0°-30°)	634.2	3.4	B2/1000		
BM (30°-60°)	1444.2	7.6	B2/2500		
BH (60°-80°)	443.4	2.3	B1/500		G1/500
BVH (80°-90°)	4.3	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°	2197.1	2197.1	2197.1	2197.1	2197.1	2197.1	2197.1	2197.1	2197.1	2197.1	2197.1
2.5°	2189.5	2204.7	2200.9	2197.1	2195.8	2198.3	2199.6	2198.3	2198.3	2198.3	2199.6
5°	2147.7	2160.4	2160.4	2169.2	2181.9	2197.1	2208.5	2211.0	2213.5	2217.4	2216.0
7.5°	2067.9	2078.1	2085.7	2114.8	2146.5	2186.9	2221.2	2238.9	2241.4	2255.3	2260.4
10°	2013.4	2026.1	2038.8	2069.2	2114.8	2175.6	2233.8	2276.8	2283.2	2316.1	2331.3
12.5°	2010.9	2023.6	2040.1	2073.0	2126.2	2190.7	2261.7	2323.7	2335.1	2383.2	2414.9
15°	2037.5	2052.7	2067.9	2108.4	2165.4	2243.9	2319.9	2397.2	2408.5	2476.9	2511.1
17.5°	2091.9	2112.2	2123.6	2164.2	2225.0	2312.3	2412.3	2501.0	2511.1	2590.9	2633.9
20°	2199.6	2223.6	2227.4	2260.4	2319.9	2413.6	2532.7	2642.9	2655.5	2746.7	2794.8
22.5°	2422.5	2456.6	2426.3	2442.8	2495.9	2589.7	2718.8	2858.1	2875.8	2979.7	3022.7
25°	2815.1	2863.1	2784.6	2756.7	2779.6	2877.1	3039.2	3215.2	3235.4	3319.1	3340.6
27.5°	3586.3	3524.2	3405.2	3288.6	3220.2	3276.0	3458.4	3676.2	3701.5	3782.6	3757.1
30°	4433.4	4378.9	4218.1	3959.8	3797.7	3788.8	3957.2	4200.3	4229.6	4306.7	4229.6
32.5°	5281.8	5230.0	5055.2	4737.3	4456.2	4316.9	4433.4	4703.1	4718.3	4767.7	4653.7
35°	6116.4	6063.2	5888.4	5563.0	5217.2	4900.6	4877.9	5181.8	5186.9	5238.8	5069.1
37.5°	6956.0	6911.6	6725.4	6406.4	6065.6	5628.8	5417.3	5635.1	5641.5	5692.1	5516.1
40°	7554.9	7573.9	7446.0	7199.1	6906.6	6429.1	6022.6	6117.6	6079.6	6164.5	6059.4
42.5°	8069.0	8107.0	7995.6	7871.5	7701.7	7281.4	6772.3	6755.9	6695.1	6740.6	6631.7
45°	8513.4	8545.1	8445.1	8416.0	8412.2	8117.2	7591.6	7492.9	7408.0	7399.2	7268.7
47.5°	8676.8	8737.6	8780.7	8878.2	9068.2	8944.0	8438.8	8285.6	8190.6	8121.0	7914.5
50°	8738.9	8803.5	8950.4	9234.0	9683.6	9736.8	9282.2	9109.9	8993.5	8866.8	8562.8
52.5°	8655.3	8770.5	8968.1	9445.5	10097.7	10372.5	10091.3	9940.7	9807.7	9601.3	9150.5
55°	8162.7	8278.0	8682.0	9443.0	10304.1	10818.2	10856.2	10789.0	10639.6	10314.2	9625.4
57.5°	7124.4	7295.3	7934.8	9121.4	10300.2	11201.9	11605.9	11653.9	11486.9	11020.8	9998.9
60°	5685.8	5917.5	6697.6	8408.4	9982.5	11409.6	12263.1	12503.7	12326.3	11717.3	10301.6
62.5°	3967.4	4235.8	4974.1	7291.4	9255.5	11260.1	12743.0	13187.4	13053.3	12340.3	10418.0
65°	2419.9	2506.0	3101.2	5737.7	8019.6	10634.6	12891.2	13557.3	13513.0	12721.5	10245.8
67.5°	1612.0	1684.2	1855.1	3934.5	6225.2	9384.7	12536.6	13492.7	13505.3	12659.5	9615.2
70°	971.3	1033.3	1144.7	2288.2	4034.5	7428.3	11438.7	12669.6	12743.0	11830.0	8419.8
72.5°	400.2	442.0	543.2	1037.1	2089.5	4714.5	9108.7	10877.7	11048.7	9947.0	6462.0
75°	226.6	248.2	319.1	520.5	906.7	2197.1	5517.4	7722.0	7974.0	6855.9	3887.6
77.5°	150.7	160.8	206.4	336.8	510.3	749.7	2357.9	4023.1	4504.4	3744.5	1682.9
80°	101.3	110.2	141.9	225.4	331.8	321.6	750.9	1490.5	1833.6	1286.6	410.3
82.5°	68.4	69.6	101.3	148.1	210.2	155.8	221.6	463.5	582.5	372.3	155.8
85°	39.3	38.0	74.7	86.1	93.7	64.6	67.1	139.3	182.3	157.0	88.7
87.5°	5.0	7.6	29.1	22.8	12.7	13.9	13.9	24.1	35.5	38.0	19.0
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°	2197.1	2197.1	2197.1	2197.1	2197.1	2197.1	2197.1	2197.1	2197.1	2197.1	2197.1
2.5°	2199.6	2198.3	2194.5	2190.7	2181.9	2176.8	2179.4	2176.8	2175.6	2176.8	2181.9
5°	2216.0	2212.3	2202.1	2189.5	2171.8	2150.2	2136.3	2116.0	2097.0	2085.7	2088.1
7.5°	2260.4	2256.5	2242.7	2207.2	2150.2	2060.4	1978.0	1905.8	1851.4	1819.7	1821.0
10°	2331.3	2325.0	2303.5	2225.0	2075.5	1879.2	1715.8	1580.3	1491.7	1450.0	1446.2
12.5°	2414.9	2407.3	2369.3	2208.5	1933.7	1627.2	1401.8	1251.1	1168.8	1132.1	1128.3
15°	2513.6	2503.6	2428.8	2130.0	1727.2	1348.6	1142.3	1029.5	976.3	943.4	944.6
17.5°	2636.5	2618.8	2473.1	2012.2	1503.2	1135.9	982.7	897.8	851.0	819.3	816.8
20°	2796.0	2766.9	2508.6	1871.6	1296.7	1001.6	875.0	804.1	768.6	740.8	735.7
22.5°	3018.9	2977.1	2551.6	1719.6	1151.1	909.2	795.3	743.3	714.2	682.5	677.5
25°	3295.0	3245.6	2604.8	1579.1	1051.0	829.4	737.0	693.9	659.8	623.0	619.2
27.5°	3681.2	3592.5	2668.2	1463.9	964.9	761.1	683.8	635.7	596.4	566.0	559.8
30°	4111.8	3966.1	2723.8	1394.2	886.4	697.7	614.2	566.0	529.3	507.8	504.0
32.5°	4519.5	4321.9	2760.6	1363.9	815.5	625.6	538.2	486.3	458.4	452.1	455.9
35°	4904.4	4643.6	2756.7	1334.8	752.1	553.4	463.5	410.3	388.8	392.6	392.6
37.5°	5347.7	4986.8	2730.2	1289.1	700.3	487.5	398.9	352.1	333.0	334.4	339.4
40°	5863.1	5383.1	2713.7	1203.0	643.3	426.7	345.7	307.7	293.8	288.7	287.4
42.5°	6412.7	5766.9	2716.2	1105.5	572.4	372.3	308.9	277.4	264.7	260.9	259.6
45°	6964.8	6132.8	2720.0	1004.2	497.6	330.5	282.4	255.8	248.2	243.1	243.1
47.5°	7483.9	6444.3	2649.1	895.3	424.2	298.9	260.9	243.1	236.8	230.4	230.4
50°	7967.7	6652.0	2478.2	768.6	365.9	273.6	244.4	231.8	225.4	219.0	219.0
52.5°	8343.8	6684.9	2195.8	638.3	325.4	254.5	234.3	222.8	215.2	208.9	207.7
55°	8511.0	6478.5	1794.4	516.7	293.8	238.1	224.2	212.8	203.9	197.5	196.3
57.5°	8467.9	6044.1	1399.3	415.3	263.4	221.6	211.5	203.9	193.7	183.6	182.3
60°	8256.5	5462.9	1054.8	345.7	235.5	203.9	197.5	191.3	177.3	162.1	159.6
62.5°	7890.4	4732.2	752.1	286.2	205.1	183.6	181.1	176.0	155.8	127.9	125.4
65°	7330.7	3844.6	506.6	238.1	176.0	160.8	162.1	153.2	126.6	95.0	92.5
67.5°	6512.7	2811.3	324.2	195.1	146.9	134.3	135.5	130.5	107.6	81.1	77.3
70°	5470.5	1861.5	211.5	148.1	117.8	103.8	111.4	112.7	91.2	65.8	63.3
72.5°	4010.4	1099.2	148.1	110.2	86.1	72.2	91.2	93.7	73.5	49.4	46.8
75°	2285.8	521.7	111.4	79.7	53.2	50.6	70.9	70.9	50.6	32.9	30.4
77.5°	959.9	217.8	78.5	52.0	30.4	29.1	48.1	44.3	25.3	15.2	15.2
80°	277.4	97.5	41.8	25.3	12.7	11.4	19.0	13.9	6.4	2.6	2.6
82.5°	108.9	43.0	16.5	10.1	5.0	5.0	2.6	0.0	0.0	0.0	0.0
85°	64.6	17.7	7.6	3.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	16.5	3.8	2.6	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)