

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: P969506

Luminaire Tested: **NAV-SB5D-835-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969506
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-835-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37002.5 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

Input Watts (W): 364.9
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



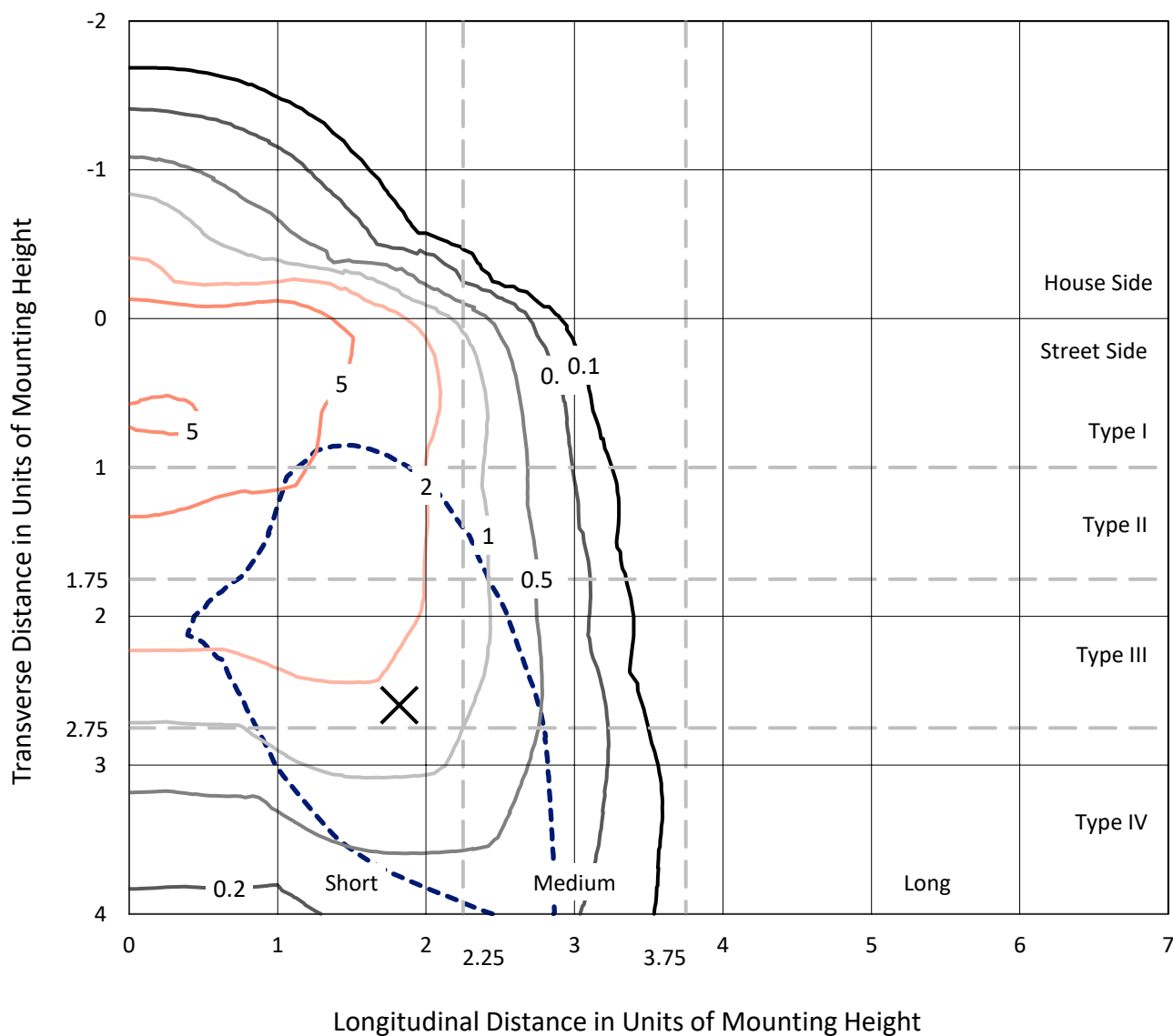
REPORT NUMBER: P969506

CATALOG NUMBER: NAV-SB5D-835-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

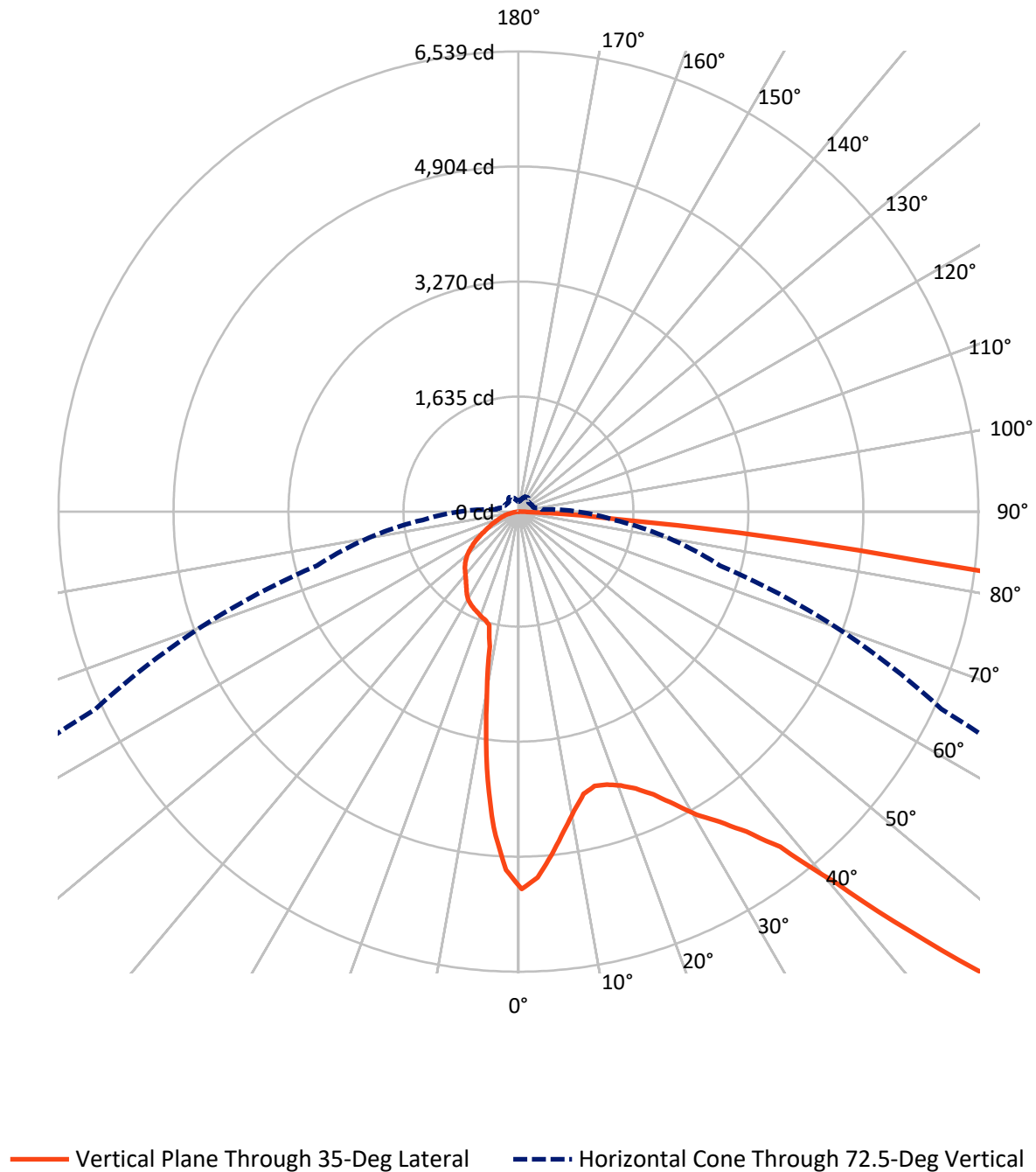


Based on 25 foot mounting height. Maximum calculated value = 8.6 fc

Type IV - Short - N/A

REPORT NUMBER: P969506
CATALOG NUMBER: NAV-SB5D-835-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P969506

CATALOG NUMBER: NAV-SB5D-835-U-T4FT-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4164.5	0.0	4164.5
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	32838.0	0.0	32838.0
	% Fixture	88.7	0.0	88.7
Total	Lumens	37002.5	0.0	37002.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	440.7	1.2
10°-20°	1030.9	2.8
20°-30°	1674.7	4.5
30°-40°	2794.3	7.6
40°-50°	5286.8	14.3
50°-60°	8400.7	22.7
60°-70°	10392.3	28.1
70°-80°	6459.9	17.5
80°-90°	522.1	1.4
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°	37002.5	100.0
0°-180°	37002.5	100.0

Coefficient of Utilization



REPORT NUMBER: P969506

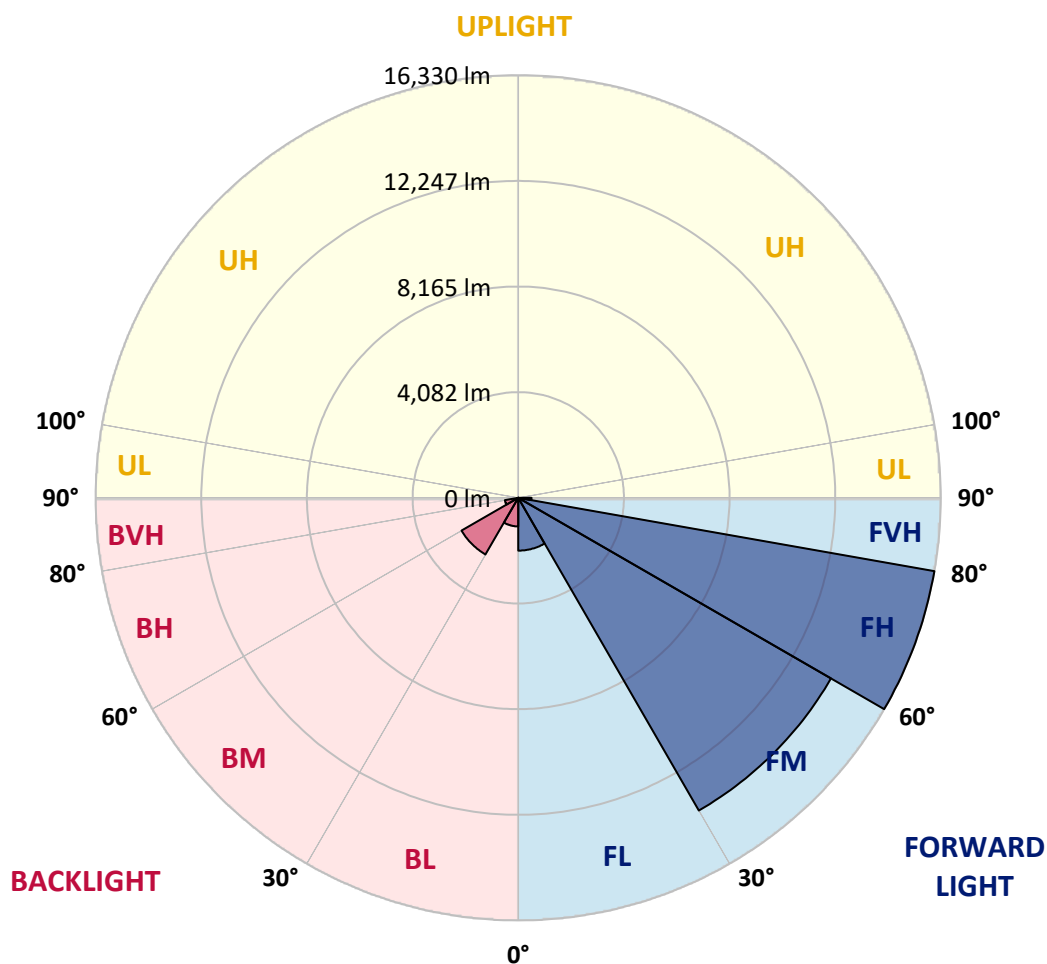
CATALOG NUMBER: NAV-SB5D-835-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2039.8	5.5			
FM	(30°-60°)	13953.6	37.7			
FH	(60°-80°)	16329.7	44.1			G5
FVH	(80°-90°)	515.0	1.4			G4/750
BL	(0°-30°)	1106.6	3.0	B3/2500		
BM	(30°-60°)	2528.2	6.8	B3/5000		
BH	(60°-80°)	522.6	1.4	B2/1000		G2/1000
BVH	(80°-90°)	7.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short



REPORT NUMBER: P969506

CATALOG NUMBER: NAV-SB5D-835-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	5362.9	5362.9	5362.9	5362.9	5362.9	5362.9	5362.9	5362.9	5362.9	5362.9	5362.9
2.5°	5124.3	5167.6	5175.8	5189.4	5189.4	5205.7	5232.7	5270.8	5333.1	5365.6	5387.3
5°	4723.0	4755.6	4796.3	4828.8	4891.1	4899.3	5005.0	5108.1	5251.7	5360.2	5436.1
7.5°	4319.0	4357.1	4411.3	4489.9	4571.2	4595.6	4755.6	4929.1	5156.9	5360.2	5487.6
10°	4034.4	4037.1	4085.9	4164.5	4294.6	4324.5	4519.7	4766.5	5051.1	5327.6	5536.4
12.5°	3874.4	3893.4	3915.1	3974.7	4099.5	4118.4	4327.2	4617.3	4945.3	5308.7	5593.3
15°	3874.4	3887.9	3901.6	3931.4	4031.6	4047.9	4232.3	4522.4	4891.1	5316.8	5685.6
17.5°	3915.1	3936.8	3926.0	3961.2	4066.9	4077.8	4240.4	4495.3	4888.4	5368.3	5826.5
20°	4012.7	4029.0	4007.2	4029.0	4134.6	4156.4	4324.5	4546.8	4934.6	5457.8	6002.8
22.5°	4167.2	4175.3	4123.9	4140.1	4248.5	4275.7	4470.8	4693.2	5045.7	5601.5	6238.7
25°	4362.4	4378.7	4300.1	4319.0	4422.1	4454.6	4679.6	4912.8	5222.0	5799.4	6539.6
27.5°	4587.5	4595.6	4527.8	4525.1	4658.0	4704.0	4931.8	5183.9	5457.8	6048.8	6919.2
30°	4845.1	4869.5	4804.4	4793.5	4961.6	4999.6	5224.6	5517.5	5804.9	6423.1	7458.7
32.5°	5048.4	5067.4	5029.4	5056.5	5227.3	5257.1	5579.8	5989.2	6349.8	6954.4	8193.4
35°	5341.2	5352.0	5265.3	5314.1	5509.3	5585.2	6065.1	6650.7	7035.8	7621.4	9153.2
37.5°	6401.3	6401.3	6032.6	5791.2	5978.3	6046.2	6729.4	7483.1	7881.6	8516.1	10362.5
40°	7868.1	7843.7	7304.2	6810.7	6786.3	6919.2	7675.6	8532.4	8974.3	9589.8	11723.5
42.5°	9432.6	9394.5	8659.8	8171.8	8090.4	8136.6	8768.3	9825.6	10275.7	10899.3	13187.6
45°	10820.7	10809.9	10137.5	9481.4	9334.9	9481.4	10132.0	11338.6	11661.2	12317.3	14649.0
47.5°	11983.8	11983.8	11493.1	11064.7	10988.8	11075.5	11978.5	13016.8	12987.1	13827.5	16072.4
50°	13323.3	13312.4	12846.0	12661.6	12740.2	12862.3	14104.1	14784.6	14358.9	15310.5	17344.0
52.5°	14261.3	14326.4	14166.4	14136.6	14537.9	14749.3	16262.2	16514.4	15587.1	16717.8	18295.7
55°	15004.2	15080.1	15264.5	15473.3	16245.9	16522.5	18352.6	18154.7	16614.7	17937.8	18843.4
57.5°	16056.2	15947.8	16232.4	16644.6	17894.4	18227.9	20377.9	19702.9	17441.6	18927.4	18903.0
60°	17333.2	17349.5	17398.2	17918.8	19540.2	19968.5	22373.5	21167.0	17973.1	19534.8	18241.4
62.5°	18867.8	18892.2	18992.5	19792.3	21749.9	22153.8	24499.0	22365.3	18217.0	19363.9	16533.4
65°	18762.0	18865.0	19984.8	22720.5	25109.1	25507.6	26979.9	23205.8	17848.3	17802.2	13461.5
67.5°	17091.9	17260.0	19133.5	26218.1	30173.7	30618.4	29978.6	23371.2	16256.8	13843.8	8781.8
70°	14901.1	14960.8	17213.8	29363.1	36038.3	36488.4	32662.8	21552.0	12336.3	7721.7	3934.1
72.5°	11636.8	11650.4	14293.8	30092.5	39221.3	39245.7	30556.1	15999.2	6634.5	2966.1	1366.5
75°	8312.8	8231.5	9573.5	24404.2	34506.4	34783.0	22907.5	7504.8	2535.0	1401.7	680.5
77.5°	4457.3	4546.8	5417.1	14472.8	23837.5	24309.3	12499.0	2163.6	1290.6	954.4	450.1
80°	1377.3	1453.2	2220.6	6626.3	13502.1	13786.9	4633.6	962.5	900.2	680.5	295.5
82.5°	433.8	450.1	1035.7	2784.5	5604.2	5734.4	1342.0	545.0	615.4	450.1	173.5
85°	124.7	127.4	460.9	1038.4	1385.5	1412.6	376.9	211.5	352.5	279.3	89.5
87.5°	13.5	43.4	173.5	173.5	122.0	119.3	40.7	46.1	100.3	35.3	16.3
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: P969506

CATALOG NUMBER: NAV-SB5D-835-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5362.9	5362.9	5362.9	5362.9	5362.9	5362.9	5362.9	5362.9	5362.9	5362.9	5362.9
2.5°	5373.8	5376.4	5341.2	5281.5	5216.5	5162.3	5094.5	5040.2	5002.3	4991.4	5010.4
5°	5411.7	5392.7	5292.4	5110.8	4893.9	4706.8	4498.0	4332.6	4224.1	4178.1	4194.3
7.5°	5468.7	5414.5	5194.8	4836.9	4422.1	4053.4	3679.2	3389.1	3204.8	3112.5	3126.1
10°	5517.5	5409.0	5032.1	4441.1	3806.6	3248.1	2743.8	2394.1	2198.8	2106.7	2109.3
12.5°	5563.5	5406.3	4820.7	3972.0	3112.5	2429.4	1960.2	1786.8	1732.5	1713.5	1708.1
15°	5650.3	5414.5	4554.9	3435.2	2421.2	1835.6	1664.7	1662.0	1672.9	1667.5	1664.7
17.5°	5769.6	5422.6	4254.0	2865.8	1868.1	1618.7	1610.5	1634.9	1651.2	1643.1	1640.3
20°	5924.1	5455.0	3934.1	2301.8	1605.0	1564.4	1583.4	1605.0	1618.7	1605.0	1602.4
22.5°	6141.1	5512.0	3584.3	1849.1	1521.0	1531.9	1548.2	1572.6	1586.1	1567.1	1564.4
25°	6406.8	5601.5	3240.0	1607.8	1480.4	1493.9	1518.3	1545.4	1561.7	1542.7	1540.0
27.5°	6751.1	5745.2	2922.8	1553.6	1439.7	1447.8	1483.1	1523.8	1545.4	1521.0	1521.0
30°	7249.9	5981.1	2648.9	1578.0	1415.3	1396.4	1445.1	1502.0	1526.4	1504.8	1502.0
32.5°	7911.5	6314.5	2480.8	1615.9	1404.5	1336.7	1382.7	1455.9	1496.6	1483.1	1483.1
35°	8779.1	6821.6	2415.7	1659.3	1396.4	1274.3	1306.9	1385.5	1455.9	1469.5	1469.5
37.5°	9831.1	7526.5	2434.7	1678.2	1371.9	1222.8	1239.0	1306.9	1399.0	1442.4	1453.2
40°	11026.7	8348.0	2543.1	1659.3	1344.8	1179.4	1182.1	1233.6	1315.0	1380.1	1401.7
42.5°	12260.4	9307.8	2743.8	1588.9	1320.4	1141.4	1133.3	1168.6	1222.8	1268.8	1287.8
45°	13434.4	10294.7	2941.7	1491.2	1290.6	1103.5	1084.6	1098.1	1108.9	1127.9	1138.8
47.5°	14459.3	10988.8	2884.8	1401.7	1249.9	1060.2	1027.6	1022.1	989.6	986.9	984.2
50°	15166.9	11140.6	2562.2	1312.3	1190.2	1011.3	959.8	927.2	870.3	843.2	845.9
52.5°	15391.9	10541.4	2093.2	1222.8	1092.6	946.3	873.0	821.5	751.0	726.6	724.0
55°	15093.6	9367.5	1672.9	1114.4	957.0	859.5	778.2	710.3	653.4	623.6	623.6
57.5°	14364.4	7873.5	1323.1	986.9	813.3	761.9	680.5	612.7	564.0	534.1	528.7
60°	13155.2	6252.2	1046.5	835.1	694.1	656.1	572.1	528.7	485.3	450.1	442.0
62.5°	11319.6	4462.7	821.5	661.5	580.3	536.8	488.0	455.5	404.0	355.2	347.1
65°	8833.3	2730.3	634.5	485.3	466.4	444.6	414.8	385.0	322.7	273.9	265.7
67.5°	5571.7	1293.2	452.7	366.0	368.7	357.9	344.3	319.9	273.9	230.4	225.0
70°	2453.7	626.3	298.3	279.3	273.9	273.9	284.6	276.5	233.2	192.5	184.4
72.5°	835.1	336.2	222.3	211.5	197.9	195.3	238.6	230.4	187.1	149.1	140.9
75°	436.5	225.0	162.7	151.8	119.3	143.7	189.8	179.0	132.8	97.6	89.5
77.5°	284.6	160.0	111.2	97.6	67.8	94.9	140.9	124.7	78.6	48.8	43.4
80°	179.0	105.8	65.1	46.1	32.5	51.6	76.0	54.2	29.8	10.9	8.1
82.5°	94.9	54.2	24.4	16.3	13.5	16.3	19.0	13.5	5.4	0.0	0.0
85°	37.9	19.0	8.1	5.4	2.7	0.0	5.4	2.7	0.0	0.0	0.0
87.5°	13.5	2.7	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)