

KMSP

Minneapolis St Paul Intl

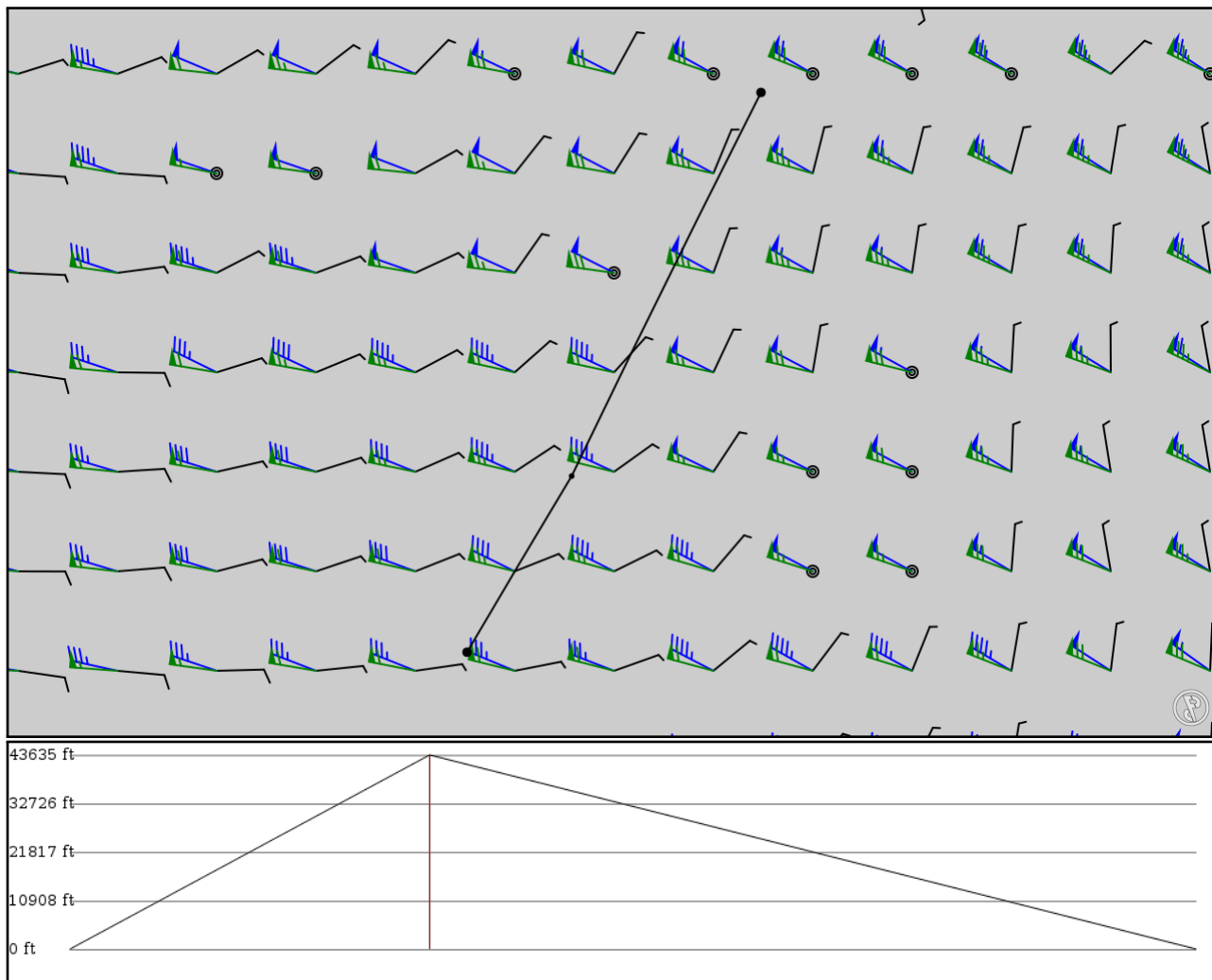
KDLH

DULUTH INTL

2024/05/09 1322Z

KMSP LENCK KDLH

125.44 nm / 232.32 km



Notes

Basic altitude profile:

- Ascent Rate: 2500ft/min
- Ascent Speed: 250kts
- Cruise Altitude: 35000ft
- Cruise Speed: 420kts
- Descent Rate: 1500ft/min
- Descent Speed: 250kts

Options:

- Use NATs: no
- Use PACOTS: no
- Use low airways: yes
- Use high airways: no

Route

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
KMSP APT	-	44.88195 -93.22201	0 ft 0 m	-	Minneapolis St Paul Intl
LENCK FIX	-	45.49878 -92.85517	13,300 ft 4,054 m	40	-
KDLH APT	-	46.84216 -92.19116	0 ft 0 m	85	DULUTH INTL

KMSP

Region: UNITED STATES
Timezone: AMERICA/CHICAGO
Runways: 4

Elevation: 841 ft / 256 m
Location: 44.881900 -93.222000
Magnetic Var: 0.276 W

METAR

KMSP 091300Z 04010KT 10SM BKN031 12/06 A2988 RMK AO2 T01220061

TAF

TAF KMSP 091120Z 0912/1018 03010KT P6SM SCT200 FM091300 04010G18KT P6SM FEW025 BKN050 FM092200 02010KT P6SM FEW060

Frequencies

DEP - 132.97 MHz - MINNEAPOLIS DEPARTURE	DEP - 125.75 MHz - MINNEAPOLIS DEPARTURE
DEP - 124.70 MHz - MINNEAPOLIS DEPARTURE	APP - 126.95 MHz - MINNEAPOLIS APPROACH
APP - 119.30 MHz - MINNEAPOLIS APPROACH	APP - 118.72 MHz - MINNEAPOLIS APPROACH
TWR - 126.70 MHz - MINNEAPOLIS TOWER	TWR - 123.95 MHz - MINNEAPOLIS TOWER
TWR - 123.67 MHz - MINNEAPOLIS TOWER	GND - 133.57 MHz - MINNEAPOLIS GROUND
GND - 127.92 MHz - MINNEAPOLIS GROUND	GND - 121.90 MHz - MINNEAPOLIS GROUND
GND - 121.80 MHz - MINNEAPOLIS GROUND	REC - 120.80 MHz - MINNEAPOLIS D-ATIS
REC - 135.35 MHz - MINNEAPOLIS D-ATIS	COM - 122.95 MHz - MINNEAPOLIS UNICOM
CLD - 133.20 MHz - MINNEAPOLIS CLEARANCE DELIVERY	

Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
17	150 ft	8,008 ft	169.56	CONCRETE	0 ft	397 ft
	46 m	2,441 m	169.83		0 m	121 m
35	150 ft	8,008 ft	349.56	CONCRETE	0 ft	394 ft
	46 m	2,441 m	349.84		0 m	120 m
12L	150 ft	8,190 ft	121.42	CONCRETE	0 ft	397 ft
	46 m	2,496 m	121.69		0 m	121 m
30R	150 ft	8,190 ft	301.44	CONCRETE	203 ft	394 ft
	46 m	2,496 m	301.71		62 m	120 m
12R	200 ft	9,985 ft	121.42	CONCRETE	0 ft	1,194 ft
	61 m	3,043 m	121.70		0 m	364 m
30L	200 ft	9,985 ft	301.44	CONCRETE	0 ft	781 ft
	61 m	3,043 m	301.72		0 m	238 m
04	150 ft	11,118 ft	44.90	CONCRETE	1,660 ft	0 ft
	46 m	3,389 m	45.18		506 m	0 m
22	150 ft	11,118 ft	224.92	CONCRETE	0 ft	410 ft
	46 m	3,389 m	225.20		0 m	125 m

Approach Nav aids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
12L	DME	IPJL	110.70 MHz	18 nm	-	-	813 ft
				33 km	-		813 m
12R	DME	IHKZ	110.30 MHz	18 nm	-	-	841 ft
				33 km	-		841 m
17	DME	ITJZ	110.95 MHz	18 nm	-	-	822 ft
				33 km	-		822 m
30L	DME	IMSP	110.30 MHz	18 nm	-	-	841 ft
				33 km	-		841 m

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
30R	DME	IINN	110.70 MHz	18 nm	-	-	813 ft
				33 km	-		813 m
35	DME	IBMA	110.95 MHz	18 nm	-	-	822 ft
				33 km	-		822 m
12L	LOC-ILS	IPJL	110.70 MHz	18 nm	121.43	-	841 ft
				33 km	121.71		841 m
12R	LOC-ILS	IHKZ	110.30 MHz	18 nm	121.44	-	841 ft
				33 km	121.72		841 m
30L	LOC-ILS	IMSP	110.30 MHz	18 nm	301.44	-	841 ft
				33 km	301.72		841 m
30R	LOC-ILS	IINN	110.70 MHz	18 nm	301.43	-	841 ft
				33 km	301.71		841 m
35	LOC-ILS	IBMA	110.95 MHz	18 nm	349.56	-	841 ft
				33 km	349.84		841 m
04	LOC-LOC	IAPL	109.30 MHz	18 nm	44.92	-	841 ft
				33 km	45.20		841 m
17	LOC-LOC	ITJZ	110.95 MHz	18 nm	169.56	-	841 ft
				33 km	169.84		841 m
22	LOC-LOC	ISIJ	110.50 MHz	18 nm	224.92	-	841 ft
				33 km	225.20		841 m
12L	GS	IPJL	110.70 MHz	10 nm	121.43	3.00	841 ft
				19 km	121.71		841 m
12R	GS	IHKZ	110.30 MHz	10 nm	121.44	3.00	841 ft
				19 km	121.72		841 m
30L	GS	IMSP	110.30 MHz	10 nm	301.44	3.00	841 ft
				19 km	301.72		841 m
30R	GS	IINN	110.70 MHz	10 nm	301.43	3.00	841 ft
				19 km	301.71		841 m
35	GS	IBMA	110.95 MHz	10 nm	349.56	3.00	841 ft
				19 km	349.84		841 m

KDLH

Region: UNITED STATES
Timezone: AMERICA/CHICAGO
Runways: 2

Elevation: 1,427 ft / 435 m
Location: 46.842200 -92.191200
Magnetic Var: 1.302 W

METAR

KDLH 091255Z 07014KT 10SM CLR 07/01 A3000 RMK A02 SLP170 T00720006

TAF

TAF KDLH 091120Z 0912/1012 07016G27KT P6SM SKC FM091600 07013KT P6SM SKC FM100100 VRB06KT P6SM FEW200

Frequencies

COM - 122.95 MHz - DULUTH TRAFFIC	REC - 124.10 MHz - ATIS
GND - 121.90 MHz - DULUTH GROUND	TWR - 118.30 MHz - DULUTH TOWER
APP - 125.45 MHz - DULUTH APPROACH	DEP - 125.45 MHz - DULUTH DEPARTURE

Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
09	150 ft	10,134 ft	92.26	CONCRETE	0 ft	400 ft
	46 m	3,089 m	93.56		0 m	122 m
27	150 ft	10,134 ft	272.29	CONCRETE	0 ft	0 ft
	46 m	3,089 m	273.59		0 m	0 m
03	150 ft	5,718 ft	31.47	ASPHALT	0 ft	0 ft
	46 m	1,743 m	32.77		0 m	0 m
21	150 ft	5,718 ft	211.47	ASPHALT	0 ft	0 ft
	46 m	1,743 m	212.78		0 m	0 m

Approach Nav aids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
09	LOC-ILS	IDLH	110.30 MHz	18 nm	92.28	-	1,426 ft
				33 km	93.58		1,426 m
27	LOC-ILS	IJUD	108.70 MHz	18 nm	272.28	-	1,426 ft
				33 km	273.58		1,426 m
09	GS	IDLH	110.30 MHz	10 nm	92.28	3.00	1,426 ft
				19 km	93.58		1,426 m
27	GS	IJUD	108.70 MHz	10 nm	272.28	3.00	1,426 ft
				19 km	273.58		1,426 m